

City of Auburn, Maine

Engineering Department www.auburnmaine.gov | 60 Court Street Auburn, Maine 04210 207.333.6601

March 29, 2022

Dear Bidder:

The City of Auburn is accepting written proposals for the City of Auburn's **2022 Washburn Field Project.** The City reserves the right to accept or reject any or all proposals in whole or in part and to waive any informality the City may determine necessary. The City also reserves to itself the exclusive right to accept any proposal when it is deemed by the City to be in its best interest. The City of Auburn is governed by Title 1 M.R.S.A. § 401-410, otherwise known as the Freedom of Information Act, which considers bid specifications as public documents. In awarding any proposal, the City may consider, but not be limited to, any of the following factors: Bidder qualifications, price, experience, financial standing with the City, warranties, references, bonding, delivery date, and service of Bidder. Vendors/Contractors shall be current on all amounts due to the City of Auburn prior to the City entering into any contract agreement. All proposals must include FOB to Auburn, Maine unless otherwise specified.

Proposals will not receive consideration unless submitted in accordance with the following instructions to bidders. Please mark sealed envelopes plainly: <u>"2022 Washburn Field</u> <u>Project-Bid #2022-033."</u>

Bid packages will be available beginning on Tuesday, March 29, 2022. Documents can be obtained from the City of Auburn's website: <u>www.auburnmaine.gov/business/bid-notices</u>. Questions regarding this Request for Bids should be directed to Kris Bennett P.E., Assistant City Engineer, at (207) 333-6601, ext. 1134. **A mandatory pre-bid will be held on Tuesday, April 5th, 2022, at 2:00pm in the Community Room (206), Auburn City Hall.** 

Please submit your proposal to the City of Auburn by 2:00 p.m. **Thursday, April 14th, 2022.** Proposals must be delivered to **Derek Boulanger, Facilities Manager/Purchasing Agent, 60 Court Street, Auburn, Maine 04210** on or before the date and time appointed. No proposals will be accepted after the time and date listed above. Proposals will be opened at 2:00 p.m. on that date in the Community Room (206), Auburn City Hall. Sincerely,

Derek Boulanger Facilities Manager/Purchasing Agent

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## CONDITIONS AND INSTRUCTIONS TO BIDDERS

- 1. Bidders shall use the enclosed bid form for quotations. Whenever, in bid forms, an article is defined by using a trade name or catalog number, the term "or approved equal", if not inserted, shall be implied.
- 2. Submit a separate unit price for each item unless otherwise specified in the bid request. Award will be made on a basis of each item, or as a group, whichever is in the best interest of the City. Prices stated are to be "delivered to destination".
- 3. Bid proposals must be completed in full and in ink. Bid proposals **are required to be notarized**. Bids may be withdrawn prior to the time set for the official opening.
- 4. Bidders or representatives will be able to view the bid tabulation on the City's website.
- 5. Awards will be made to the lowest responsible bidder of the Total Bid, considering the quality of the materials, date of delivery, cost which meets specification and is in the best interest to the City of Auburn.
- 6. All transportation charges, including expense for freight, transfer express, mail, etc. shall be prepaid and be at the expense of the vendor unless otherwise specified in the bid.
- 7. The terms and cash discounts shall be specified. Time, in connection with discount offered, will be computed from date of delivery at destination after final inspection and acceptance or from date of correct invoice, whichever is later.
- 8. The City is exempt from payment of Federal Excise Taxes on the articles not for resale, Federal Transportation Tax on all shipments and Maine Sales Tax and Use Taxes. Please quote less these taxes. Upon application, exemption certificate will be furnished with the Purchase Order when required.
- 9. No contract may be assigned without the written consent of the Purchasing Director or his designate. The contract shall not be considered valid until a purchase order has been issued to the successful bidder.
- 10. Please state "2022 Washburn Field Project Bid # 2022-033", on submitted, sealed envelope.
- 11. The City of Auburn reserves the right to waive any formality and technicality in bids whichever is deemed best for the interest of the City of Auburn.

- The completion date for this project is August 19, 2022. Liquidated damages of \$500/calendar day will be assessed on uncompleted work. Project start date shall be after June 16, 2022 (last day of school).
- 13. This project is grant funded through the Elementary and Secondary School Emergency Relief Fund. All Contractors who bid for this project must adhere to:
  - Appendix A: Addendum to Contract for Goods or Services Using Federal Awards from the U.S. Department of Education
  - Appendix B: Davis-Bacon Act Certification
  - Appendix C: Contract Provisions
- 14. Contractors must submit the following:
  - Signed Addendum 2 Davis-Bacon Act Certification
  - Signed assertion letter that your company and any subcontractors you plan to engage are not suspended or debarred from performing work on federally funded projects. Auburn Public Schools is required to search the System for Awards Management or SAM database to verify this assertion.
- 15. The Contractor shall use US-produced Goods, Products & Materials to the greatest extent practicable.

## **GENERAL CONDITIONS**

#### 1. Equal Employment Opportunity

The City of Auburn is an Equal Opportunity Employer and shall not discriminate against an applicant for employment, and employee or a citizen because of race, color, sex, marital status, physical and/or mental handicap, religion, age, ancestry or natural origin, unless based upon a bona-fide occupation qualification. Vendors and Contractor or their agents doing business with the City shall not violate the above clause or the Civil Rights Acts of 1964. Violations by vendors shall be reviewed on a case-by-case basis and may mean an automatic breach of contract or service to the City of Auburn.

#### 2. Save Harmless

The Bidder agrees to protect and save harmless the owner from all costs, expenses or damages that may arise out of alleged infringement of patents of materials used.

#### 3. Subcontracting

The Bidder shall not subcontract any part of the work or materials or assign any monies due it without first obtaining the written consent of the municipality. Neither party shall assign or transfer its interest in the contract without the written consent of the other party.

#### 4. Warranty

The Bidder warrants that all work will be of good quality and free from faults and defects, and in conformance with the specifications. All work not so conforming to these standards may be considered defective. The Bidder agrees to be responsible for the acts and omissions of all of its employees and all subcontractors, their agents and employees, and all other persons performing any of the work under a contract with the Bidder.

#### 5. Bonds, Retainage and Payments

A bid bond shall be submitted with appropriate bid forms in the amount of 5% of the total contract value. Also, payment and performance bonds will be required from the Contractor who is awarded this contract. Retainage in the amount of 10% will be held from each progress payment and shall be released at the discretion of the Project Engineer. Payments shall be made by the City to the Contractor 30 days after receipt of the request for payment.

#### **BID PROPOSAL FORM**

Due: Thursday April 14th, 2022

To: City of Auburn
Derek Boulanger, Facilities Manager/Purchasing Agent
60 Court Street
Auburn, ME 04210

The undersigned individual/firm/business guarantees this price for Thirty days (30) from the bid due date. The undersigned submits this proposal without collusion with any other person, individual, or firm or agency. The undersigned ensures the authority to act on behalf of the corporation, partnership or individual they represent; and has read and agreed to all of the terms, requests, or conditions written herein by the City of Auburn, Maine. By signing this bid form, the firm listed below hereby affirms that its bid meets the minimum specifications and standards as listed above.

Signature	Name (print)
Title	Company
Address	
Telephone No	Fax No
Email Address:	

## **BID FORM**

ITEM	DESCRIPTION	UNIT	QNTY	UNIT COST	TOTAL COST
BASE BID	Washburn School Field	LS	1		
203.24	Additional Common Borrow	CY	500		
	Total				

Company Name:
Signed by:
Title:
Print Name:
Address:
Tel. #
Date:
Addendum Acknowledged:
#Date
#Date

## **SPECIAL PROVISIONS**

The following Supplemental Specifications and Special Provisions shall amend the "Maine, Department of Transportation Standard Specifications, **March 2020 Edition**" including any and all applicable revisions and special provisions. In case of conflicts, these Supplemental Specifications (1) and Special Provisions (2) shall take precedence and shall govern.

(1) Supplemental Specifications - modifications, additions and deletions to the existing Standard Specifications.

(2) Special Provisions - specifications in the contract which are for additional items not covered in the Standard Specifications

## F-1 Work Hours

No work shall proceed on this project prior to the hour of 7:00 AM or after 7:00 PM (prevailing time) on any working day unless the City has granted prior approval. The definition of work for this specification shall include starting or moving of equipment, machinery, or materials. Any day worked for four hours or more will be considered a full working day.

#### F-2 Notification of Residents

Residents shall be notified sufficiently in advance of any construction affecting the driveway and sidewalk to allow adequate time for their removal of personal vehicles. Locations of cuts for drive access affecting individual residents shall be brought to their attention.

## F-3 Traffic Signs

All existing traffic signs, which are to be removed during construction, shall be dismounted and the posts removed and shall be stacked in an area approved by the Engineer. Contractor shall protect the signs from damage while in his possession and shall repair, at no additional cost to the City, any damages cause by his operations.

Stop signs are to be maintained at their original locations at all times during the progress work.

Prior to the start of any construction work, the Contractor shall prepare an acceptable inventory of all signs within the project limits which shall be used as a guide for replacement should signs be removed for construction purposes.

This work shall be considered as subsidiary obligation of the contract for which no special payment will be made.

## F-4 Protection of Trees

The Contractor shall be responsible for the preservation of all trees on the project, which are not to be removed. Any trees damaged by the Contractor's operations shall be repaired as approved by tree dressing or paint in accordance with the appropriate provisions of Section 201 of Standard Specifications.

## F-5 Maintenance and Protection of Traffic

The Contractor shall be responsible for the maintenance and protection of all vehicular and pedestrian traffic at all times during construction and shall erect suitable warning signs, flashing barriers or temporary lighting devices of sufficient size and number to afford protection to the traveling public in accordance with the most recent edition of "Manual on Uniform Traffic Control Devices for Streets Highways" published by the Department of Transportation of the Federal Highway Administration.

The Contractor shall be held responsible for all damage to the work due to any failure of the warning devices to properly protect the work from the traffic, pedestrians or other causes. Traffic control shall be in accordance with the City of Auburn's Traffic Detail Policy effective April 1, 2006.

## F-5A Materials

Materials shall meet the requirements specified for the various subsections of the Specifications. Equals shall be approved only prior to the bid opening.

## F-6 Survey

The Project Engineer will establish, at their discretion, a benchmark location and one construction baseline. The Contractor shall be responsible for maintaining these controls during construction and providing all additional survey required, which shall be done by a competent Engineer or Surveyor.

## F-7 Waste Areas

The disposal of waste and surplus material and slash from tree cutting shall be as outlined in Section 203.06 - Waste Areas of the Supplemental Specifications.

## F-8 Occupational Safety and Health

The Contractor is hereby advised that all work to be furnished to the City shall be performed with equipment, methods, and use of personnel in conformance with the pertinent Occupational Safety and Health Act requirements of the State of Maine and with the regulations for

construction as specified by the Department of Labor and Occupational Safety and Health Administration (OSHA) as currently amended.

## F-9 Pre-Construction Conference

A conference will be held at 60 Court Street, Auburn, Maine within ten (10) days after the awarding of the contract. At this time, the Contractor will be required to submit a graphically illustrated schedule and a plan showing project activities. City officials and representatives of the various utility companies involved in the project will be present at this meeting.

It is the purpose of this meeting to inform the various agencies of the proposed work schedule, and to give them the opportunity of discussing any difficulties and of offering suggestions to the Contractor concerning his proposed schedule in order that full cooperation may be reached.

## F-10 Schedule of Operations

The above-mentioned schedule of operations in Section F-10 shall consist of a bar chart detailing the activities included in the contract. Although a bar chart is acceptable as a minimum, more complex and detailed schedules (i.e., flow charts, critical paths, etc.) are encouraged and will be accepted by the City. Updates will be required.

## F-11 Traffic Officers

Traffic control shall be the responsibility of the Contractor and as directed. Traffic control officers will be employed by the Contractor. Police detail is not anticipated for this project.

## F-12 Limitation of Operations

The Contractor shall conduct the work at all times in such a manner and in such sequence as will assure the least interference with traffic. The Contractor shall not open up work to the prejudice or detriment of work already started. The Engineer may require the Contractor to finish a section on which work is in progress before work is started on any additional sections, if finishing such section is essential to public convenience.

Waste and surplus material shall not be stockpiled, but shall be disposed of in areas as designated in Section 203.06, Waste Areas, of the Supplemental Specifications.

## F-13 Questions Regarding Plans and Documents

Questions from prospective bidders relative to this Contract shall be submitted no later than 4:00 p.m. Friday April 8<sup>th</sup> 2022 and emailed to:

Kris Bennett P.E. Assistant City Engineer Engineering Division <u>kbennett@auburnmaine.gov</u>

#### F-14 Record Drawings

The Contractor shall keep daily records of all changes in the work and records of underground infrastructure. Upon completion of the project, the Contractor shall deliver to the Engineer copies of daily records. Final payment will not be made until Engineer receives copies of daily records. The Contractor shall submit as-built mark ups on a scaled GIS sheet detailing stormwater structures and pipes.

#### F-15 Waste Material

All waste material shall be removed from the site and the area left clean upon completion of work. Any equipment or structures damaged by the Contractor shall be repaired or replaced at no additional cost to the City.

#### F-16 Quality Assurance

The Contractor shall be responsible at all times for maintaining top quality assurance during performance of his work.

#### F-17 Bids

No bids shall be withdrawn within a period of sixty -(60)- days after the opening of the bids.

#### F – 18 Sawcut Joints

Joints created by sawcutting shall be protected prior to paving. Damaged joints will be cut back at no additional cost to the City.

#### F-19 Weekly Quantity Reports

The Contractor shall submit weekly electronic reports of daily quantities by the end of the day the following Monday. These reports shall be emailed to <u>kbennett@auburnmaine.gov</u>.

#### F- 20 Change Orders

Changes in the scope of work will be approved by the Project Engineer and adjusted by Change Orders.

## SUPPLEMENTAL SPECIFICATIONS SECTION 100 - GENERAL PROVISIONS

## 1. SCOPE

The work covered by this section includes furnishing all labor, equipment, materials, incidentals, and the performing of all operations in connection with the work encompassed by these contract documents. All work shall be subject to the terms and conditions of the contract documents.

#### 2. STANDARD SPECIFICATIONS

The City of Auburn, Maine has adopted for this project, the "State of Maine, Department of Transportation, Standard Specifications, **March 2020 Edition**", and the Standard Details (December 2002) and the following Supplemental Specifications including all current additions or modifications thereof. In the case of conflict with the following Supplemental Specifications, addenda shall take precedence and shall govern.

Wherever in the Specifications and in this Contract the term "Department", "the Department of Transportation", "MDOT", or any reference to the "State of Maine, Department of Transportation" or its "Engineers" is mentioned, the intent and meaning shall be interpreted to refer to the CITY OF AUBURN, MAINE, or their authorized representative.

## SUPPLEMENTAL SPECIFICATIONS SECTION 203 – COMMON EXCAVATION

The provisions of Section 203 of the Standard Specifications shall apply with the following additions and modifications:

203.01 Description

The common borrow item shall be used for any additional common borrow required beyond the 1,000 cubic yards included in the Base Bid.

203.19 Basis of payment

The accepted quantity of common borrow will be paid for at the contract unit price per cubic yard which price will be full compensation for completed in place material.

Pay Item		Pay Unit
203.24	Additional Common Borrow	Cubic Yard

#### **BID BOND**

KNOW ALL BY THESE PRESENTS, that we, the undersigned, as Principal, and Surety, are hereby firmly bound unto as held and as OWNER in the penal sum of \_\_\_\_\_for payment of which, well and truly to be made, we hereby jointly and severally bind ourselves, successors and assigns.

Signed, this \_\_\_\_\_\_ day of \_\_\_\_\_\_, 2022.

The Condition of the above obligation is such that whereas the principal has submitted to \_\_\_\_\_\_a certain BID,

attached hereto and hereby made a part hereof to enter into a contract in writing, for the

NOW, THEREFORE,

(a) If said BID shall be rejected, or

(b) If said BID shall be accepted and the Principal shall execute and deliver a contract in the Form of Contract attached hereto (properly completed in accordance with said BID) and shall furnish a BOND for his faithful performance of said contract, and for the payment of all persons performing labor or furnishing materials in connection therewith, and shall in all other respects perform the agreement created by the acceptance of said BID,

then this obligation shall be void, otherwise the same shall remain in force and effect; it being expressly understood and agreed that the liability of the Surety for all and all claims hereunder shall, in no event, exceed the penal amount of this obligation as herein stated.

The Surety, for value received, hereby stipulates and agrees that the obligations of said Surety and its BOND shall be in no way impaired or affected by any extension of time within which the OWNER may accept such BID; and said Surety does hereby waive notice of any such extension.

IN WITNESS WHEREOF, the Principal and the Surety have hereunto set their hands and seals, and such of them as are corporations have caused their corporate seals to be hereto affixed and these presents to be signed by their proper officers, the day and year first set forth above.

> \_\_\_\_\_ (L.S) Principal

Surety

Ву:\_\_\_\_\_

IMPORTANT - Surety companies executing BONDS must appear on the Treasury Department's most current list (Circular 570 as amended) and be authorized to transact business in the state where the project is located.

## SAMPLE AGREEMENT

THIS AGREEMENT is made this ### day of Month Year, by and between the CITY OF AUBURN, a municipal corporation existing under the laws of the State of Maine and located in the County of Androscoggin, State of Maine (hereinafter "CITY"), Company Name, Address, EIN, (hereinafter "CONTRACTOR"),

#### WITNESSETH:

In consideration of the mutual covenants and conditions contained herein, the CITY and the CONTRACTOR agree as follows:

#### SPECIFICATIONS:

1. The CONTRACTOR shall furnish all of the material and perform all of the work shown on the drawings and described in the specifications entitled: Bid # XXXXX Bid Title which are attached hereto and made a part hereof, and the CONTRACTOR covenants that it shall do everything required by this Agreement, the Special Provisions of the Agreement, the Invitation to Bid and the Specifications in return for payment as provided herein.

#### COMPLETION DATE:

2. The work to be performed under this Agreement shall be commenced by Month day, year and fully completed on or before Month day, year.

## CONTRACT PRICE:

3. The CITY shall pay the CONTRACTOR for the performance of the Agreement the sum of \$XXX

## PERFORMANCE BOND:

4. If required by the City, the CONTRACTOR shall furnish to the CITY at the time of the execution of this Agreement a performance bond and a labor and material payment bond each in the amount of \$Dollar amount or N/A (whichever applies) executed by a surety company satisfactory to the CITY, guaranteeing the performance and payment by the CONTRACTOR. Yes, Required (Initials: \_\_\_\_) No, Waived (Initials \_\_\_)

#### GUARANTEE:

5. The CONTRACTOR shall guarantee his work against any defects in workmanship and materials for a period of one year from the date of the CITY's written acceptance of the project.

PERMITS AND LICENSES:

6. Permits and licenses necessary for the prosecution of the work shall be secured and paid by the CONTRACTOR.

CITY'S RIGHT TO TERMINATE CONTRACT:

7. If the CONTRACTOR should be adjudged a bankrupt, or if it should make a general assignment for the benefit of creditors, or if a receiver should be appointed on account of its insolvency, or if it should persistently or repeatedly refuse or should fail, except in cases for which extension of time is provided, to supply enough properly skilled workmen or proper materials, or if it should fail to make prompt payment to subContractors or for material or labor, or persistently disregard laws, and ordinances, or otherwise be guilty of a substantial violation of any provision of the Agreement, then the CITY when sufficient cause exists to justify such action, may, without prejudice to any other right or remedy and after giving the CONTRACTOR, and his surety, seven (7) days written notice, terminate the employment of the CONTRACTOR and take possession of the premises and of all materials, tools and appliances thereon and finish the work by whatever method it may deem expedient. In such case the CONTRACTOR shall not be entitled to receive any further payment until the work is finished. If the unpaid balance of the Agreement price shall exceed the expense of the finishing the work, including compensation for additional architectural, managerial and administrative services, such excess shall be paid to the CONTRACTOR. If such expense shall exceed such unpaid balance, the CONTRACTOR shall pay the difference to the CITY.

## CONTRACTOR'S LIABILITY INSURANCE:

8.The CONTRACTOR shall not commence work under this Agreement until he has obtained all insurance required under this paragraph and such insurance has been approved by the CITY, nor shall the CONTRACTOR allow any subContractor to commence work on his subcontract until all similar insurance required of subContractor has been so obtained and approved. It is a requirement that the CITY be named as an Additional Insured on the General Liability and Automobile Liability policies.

Commercial General Liability to include products and completed operations, and blanket contractual. The limits of liability shall be as follows:

Bodily Injury and Property Damage	\$1,000,000
Personal Injury and Advertising Injury	\$1,000,000
Per Project Aggregate	\$1,000,000
General Aggregate	\$2,000,000
Products and Completed Operations Aggregate	\$2,000,000
Medical Payments	\$10,000

(b) Business Automobile Liability

The CONTRACTOR shall maintain and cause all sub-Contractors and lower tier Contractors to maintain business automobile liability insurance covering all owned non-owned, leased, rented or hired automobiles (symbol 1). The limits of liability shall be as follows:

Bodily Injury and Property Damage \$1,000,000

Automobile physical damage coverage shall be at the option of the CONTRACTOR, all sub-Contractors and lower tier Contractors. The CITY shall not be liable for physical loss or damage to any owned, non-owned, leased, rented or hired automobile.

Workers' Compensation Insurance

The CONTRACTOR shall maintain and cause all sub-Contractors and lower tier Contractor's to maintain Workers' Compensation and Employers Liability in accordance with the laws and regulations of the State of Maine. The limits of liability provided shall be as follows:

Coverage A: Statutory Coverage B: \$100,000/\$500,000/\$100,000

Professional Liability

If the CONTRACTOR is an Architect, Engineer or Surveyor, they shall maintain a policy of insurance to pay on their behalf whatever amounts that may become legally required to pay on account of an error, omission or negligent act.

Limits of Liability shall be as follows:

\$1,000,000 per occurrence and in the aggregate site specific.

It is a requirement that this policy be maintained for a period of three (3) years following completion of the project.

Certificates of Insurance of the types and in the amounts required shall be delivered to the CITY prior to the commencement of any work by the CONTRACTOR, subContractor or lower tier Contractor or any person or entity working at the direction or under control of the CONTRACTOR. The CONTRACTOR shall assume the obligation and responsibility to confirm insurance coverage for all sub-Contractors or lower tier Contractors who will participate in the project.

The Certificate of Insurance and the policies of insurance shall include a sixty (60) day notice to the CITY of cancellation, non-renewal or material change in coverage or form.

The CONTRACTOR and his surety shall indemnify and save harmless the CITY, his officers and employees from all suits, actions or claims of any character brought because of any injuries or damage received or sustained by any person, persons or property on account of the operations of the said CONTRACTOR; or on account of or in consequence of any neglect in safeguarding the work; or through use of unacceptable materials in construction of the work; or because of any act or omission, neglect, or misconduct of said CONTRACTOR; or because of any claims or amounts recovered from any infringements or patent trademark, or copyright; or from any claims or amounts arising or recovered under the "Workmen's Compensation Act" or of any other law, ordinance, order or decree; and so much of the money due to the said CONTRACTOR under and by virtue of his/her contract as shall be considered necessary by the CITY for such purpose, may be retained; or in case no money is due, his surety may be held until such suit or suits, action or actions, claim or claims, for injuries or damages as aforesaid shall have been settled and suitable evidence to that effect furnished to the CITY.

## Waiver of Subrogation

Payment of any claim or suit including any expenses incurred in connection therewith by the CITY, or any insurance company on behalf of the CITY shall not constitute a waiver of subrogation against the CONTRACTOR, sub-Contractors or any lower tier Contractor in the event that such claim or suit was caused by or contributed to as a result of the negligent acts of the CONTRACTOR, any sub-Contractors or lower tier Contractors.

## **Construction Agreement**

The CONTRACTOR shall and does hereby agree to indemnify, save harmless and defend the CITY from the payment of any sum or sums of money to any person whomsoever on account of claims or suits growing out of injuries to persons, including death, or damages to property, caused by the CONTRACTOR, his employees, agents or sub-Contractors or in any way attributable to the performance and execution of the work herein contracted for, including (but without limiting the generality of the foregoing), all claims for service, labor performed, materials furnished, provisions and suppliers, injuries to persons or damage to property, liens, garnishments, attachments, claims, suits, costs, attorney's fees, costs of investigation and defense. It is the intention of this paragraph to hold the CONTRACTOR responsible for the payment of any and all claims, suits, or liens, of any nature character in any way attributable to or asserted against the CITY, or the CITY and the CONTRACTOR, which the City may be required to pay. In the event the liability of the CONTRACTOR shall arise by reason of the sole negligence of the CITY's agents, servants or employees, then and only then, the CONTRACTOR shall not be liable under the provisions of this paragraph.

## DAMAGES:

9.The CONTRACTOR shall defend, indemnify and save harmless the CITY and all persons acting for or in behalf of it against all claims for injuries (including death), loss or damage, arising out of the performance out this contract.

## LIENS:

10.Neither the final payment nor any part of the retained percentage shall become due until the CONTRACTOR, if required, shall deliver to the CITY a complete release of all liens arising out of the Agreement, or receipts in full in lieu thereof and, if required in either case, an affidavit that so far as it has knowledge or information the releases and receipts include all the labor and material for which a lien could be filed; but the CONTRACTOR may, if any SUB-CONTRACTOR refuses to furnish a release or receipt in full, furnish a bond satisfactory to the CITY to indemnify it against any lien. If any lien remains unsatisfied after all payment are made, the CONTRACTOR shall refund to the CITY all moneys that the latter may be compelled to pay in discharging such a lien, including all costs and a reasonable attorney's fee.

## ASSIGNMENT:

11. Neither party to the Agreement shall assign the Agreement or sublet it as a whole without the written consent of the other, nor shall the CONTRACTOR assign any moneys due or to become due to it hereunder, without the previous written consent of the CITY.

## SUBCONTRACTS:

12. The CONTRACTOR shall not sublet any part of this Agreement without the written permission of the CITY. The CONTRACTOR agrees that it is as fully responsible to the CITY for the acts and omissions of its SUB-CONTRACTORS and of persons either directly or indirectly employed by them, as it is for the acts and omissions of persons directly employed by it.

## USE OF PREMISES:

13.The CONTRACTOR shall confine its apparatus, the storage of materials and operations of its workers to limits indicated by law, ordinance and permits and shall not otherwise unreasonably encumber the premises with its materials. If any part of the project is completed and ready for use, the CITY may, by written and mutual consent, without prejudice to any of its rights or the rights of the CONTRACTOR, enter in and make use of such completed parts of the project. Such use or occupancy shall in no case be construed as an acceptance of any work or materials.

## CLEANING UP:

14. The CONTRACTOR shall at all times keep the premises free from accumulation of waste materials or rubbish caused by its employees or work, and at the completion of the work it shall remove all its rubbish from and about the project, and all its tools, scaffolding and surplus materials and shall leave its work "broom-clean" or its equivalent, unless more exactly specified. In case of dispute, the CITY may remove the rubbish and charge the cost to the CONTRACTOR.

PAYMENTS:

15. Unless otherwise agreed to, the CITY shall make payments on account of the Agreement as follows:

Within 30 days, as invoices are submitted for work completed to the satisfaction of the CITY.

IN WITNESS WHEREOF, the parties hereto have executed this Agreement on the day and year first above written.

BY:\_\_\_\_\_

Witness

BY:\_\_\_\_\_ Finance Director

BY:\_\_\_\_\_

Witness

BY:\_\_\_\_\_

Contractor

## **APPENDIX A**

# Addendum to Contract for Goods or Services Using Federal Awards from the U.S. Department of Education

#### ADDENDUM TO CONTRACT FOR GOODS OR SERVICES USING FEDERAL AWARDS FROM THE U.S. DEPARTMENT OF EDUCATION

Project Description:			
Date of Contract:	, 2021	Contract Price: \$	
Parties to the Contract:			
(the "School Unit" or "owner")			

(the "Contractor")

This Addendum is hereby attached to and made a part of the contract identified above (the "Contract"). Notwithstanding anything to the contrary in the Contract, the Parties agree as follows:

- I. Federal Award Contract. The Contract is funded in whole or in part with federal financial assistance. Accordingly, the Contractor agrees to comply with all applicable federal law, regulations, executive orders, grant agreements, and federal agency policies, procedures and directives, including without limitation all applicable provisions of 2 CFR Part 200, as adopted and amended as regulations of the U.S. Department of Education in 2 CFR Part 3474 (uniform grant guidance) and 2 CFR Part 180, as adopted and amended as regulations of the U.S. Department of Education in 2 CFR Part 3474 (uniform grant guidance) and 2 CFR Part 180, as adopted and amended as regulations of the U.S. Department of Education in 2 CFR Part 3474 (DMB Guidelines to Agencies on Governmentwide Debarment and Suspension).
- **II. Termination for Cause and Convenience**. If the Contract Price exceeds \$10,000 and to the extent that the Contract does not contain any provisions allowing the School Unit to terminate the Contract for convenience or for cause, the following termination provisions shall apply.
  - A. <u>Termination for Convenience</u>. The performance of work or services under the Contract may be terminated by the School Unit in whole, or from time to time in part, whenever the School Unit shall determine that such termination is in its best interest. Any such termination shall be effected by delivery to the Contractor a notice of termination specifying the extent to which performance of work or services under the Contract is terminated, and the date upon which such termination becomes effective. The School Unit shall pay the Contractor the contract price for any goods or services previously paid for that are completed as of the termination date and accepted by the School Unit.
  - B. <u>Termination for Cause</u>.
    - 1. The School Unit may, by written notice of default to Contractor, terminate the whole or any part of the Contract if the Contractor (a) fails to make, when due, any undisputed payment required under the Contract and such failure is not remedied within 7 days after receipt of written notice of the failure to make payment; (b) makes any representation or warranty that is false or misleading in any material respect when made; (c) fails to make delivery of the goods or perform the services specified in the Contract within the time specified therein; (d) fails to perform any covenant or obligation set forth in the Contract or fails to make progress so as to endanger performance of the Contract in accordance with its terms, and such failure is not remedied upon receipt of a written notice of the default within the cure period, if any, set forth in said notice; or (e) is dissolved, becomes insolvent or is unable to pay its debts as they become due; commences a voluntary proceeding or has instituted against it a proceeding seeking a judgment of insolvency or bankruptcy or any other relief under any insolvency or bankruptcy law or other similar law affecting creditors' rights, or a petition is presented for its winding-up, reorganization, or liquidation; seeks or consents to the appointment of an administrator, provisional liquidator, conservator, receiver, trustee, custodian, or other similar official for it or for all or substantially all of its assets; has a secured party take possession of all or substantially all of its assets; has a distress, execution, attachment, sequestration, or

other legal proceeding levied, enforced, or sued on or against all or substantially all of its assets; causes or is subject to any event with respect to it, which has an analogous effect to any of the events specified in this clause (e); or takes any action in furtherance of, or indicating its consent to, approval of, or acquiescence in, any of the acts specified in this clause (e).

- 2. <u>Cure Period; Remedies</u>. The School Unit may, in its sole discretion, allow the Contractor a period of time to cure the default. The cure period, and any other conditions on the opportunity to cure a default, shall be stated in the notice of default. If the Contractor fails to remedy the default to the School Unit's satisfaction during the cure period, the School Unit shall have the right to terminate the Contract without any further obligation to Contractor. Any such termination for default shall not in any way operate to preclude the School Unit from also pursuing all available remedies available under the Contract or at law or in equity against Contractor and its sureties, if any. No action or failure to act by the School Unit shall constitute a waiver of any right or duty afforded it under the Contract, nor shall any such action or failure to act constitute an approval of or acquiescence in any default.
- 3. <u>Closeout Setoffs</u>. The School Unit shall be entitled, at its option and in its sole discretion, to set off, against any amounts due and owing from the Contractor under the Contract, any amounts due and owing to the Contractor under the Contract.
- 4. <u>Remedies Cumulative</u>. The rights and remedies contained in this section are cumulative with the other rights and remedies available under the Contract or at law or in equity.
- **III. Procurement of Recovered Materials.** In the performance of this Contract, the Contractor shall comply with section 6002 of the Solid Waste Disposal Act, as amended by the Resource Conservation and Recovery Act, by, *inter alia*, making maximum use of products containing recovered materials that are EPA-designated items unless the product cannot be acquired (i) competitively within a timeframe providing for compliance with the contract performance schedule, (ii) meeting contract performance required, or (iii) at a reasonable price.
- IV. Prohibition on Certain Telecommunications and Video Surveillance Services or Equipment. The Contractor shall not (i) procure or obtain; (ii) extend or renew a contract to procure or obtain; or (iii) enter into a contract (or extend or renew a contract) to procure or obtain equipment, services, or systems that uses covered telecommunications equipment or services as a substantial or essential component of any system, or as critical technology as part of any system. As described in Public Law 115-232, section 889, covered telecommunications equipment is telecommunications equipment produced by Huawei Technologies Company or ZTE Corporation (or any subsidiary or affiliate of such entities).
- V. **Debarment and Suspension.** If the Contract Price equals or exceeds \$25,000, the following provisions apply.
  - A. The Contract is a covered transaction for purposes of 2 CFR Part 180. The Contractor agrees to comply with 2 CFR Part 180, subpart C, as adopted and amended as regulations in 2 CFR Part 3485.
  - B. The Contractor agrees to review, and assures that all of its subcontractors will review, the U.S. General Services Administration ("GSA") "System for Award Management" at https://www.sam.gov and the Excluded Parties Listing System at http://epls.arnet.gov before entering into this Contract or any subcontracts for the performance of work or services contemplated under the Contract. Contractor further agrees to and certifies that all subcontractors will enter into no arrangement to perform the work or services under the Contract with any party that is debarred or suspended, pursuant to 2 CFR Part 180; Executive Orders Nos. 12549 and 12689, 31 U.S.C. § 6101 note; and all other applicable Federal laws, regulations, or guidance regarding participation with debarred or suspended subcontractors. Contractor agrees to comply with said requirements throughout the period of this Contract.

- C. The Contractor certifies that neither it nor its principals, affiliates, or subcontractors is presently debarred, suspended, proposed for debarment, declared ineligible, or involuntarily excluded from participation in this transaction by any Federal Department or Agency.
- D. The certifications made by the Contractor pursuant to paragraphs B and C are a material representation of fact upon which reliance is placed by the School Unit. If it is later determined that Contractor knowingly rendered an erroneous certification, in addition to other remedies available to the Federal Government, the School Unit may terminate this transaction for cause of default.
- E. The Contractor agrees to include the provisions of this section, as modified to apply to each subcontractor, in each subcontract issued pursuant to this Contract.
- VI. Byrd Anti-Lobbying Amendment. If the Contract Price equals or exceeds \$100,000, the following provisions apply.
  - A. The Contractor shall forthwith file with the School Unit the certification and disclosure, if any, attached hereto as <u>Exhibit A</u>.
  - B. The Contractor agrees that neither it nor any subcontractor shall or has used any Federal appropriated funds to pay any person or organization for influencing or attempting to influence an officer or employee of the School Unit, a member of Congress, an officer or employee of Congress, or an employee of a member of Congress on matters that involve the Contract work or services, including the performance, extension, continuation, renewal, amendment, or modification of this Contract, in accordance with 31 U.S.C. § 1352, as amended, and other applicable laws, regulations, and guidance prohibiting the use of Federal funds for any activity concerning legislation or appropriations designed to influence the U.S. Congress or a State legislature, except as permitted by applicable Federal law, regulations, or guidance.
  - C. Each tier shall also disclose the name of any registrant under the Lobbying Disclosure Act of 1995 who has made lobbying contacts on its behalf with non-federal funds with respect to that federal Contract, grant or award covered by 31 U.S.C. § 1352. Such disclosures are forwarded from tier to tier up to the School Unit. The Contractor agrees to include this contract term, as modified to apply to each Subcontractor, in each subcontract issued pursuant to this Contract.
- VII. Clean Air; Clean Water. If the Contract Price exceeds \$150,000, the following provisions apply.
  - A. <u>Clean Air Act</u>. The Contractor agrees to comply with all applicable standards, orders, or regulations issued pursuant to the Clean Air Act, as amended, 42 U.S.C. §§ 7401 *et seq*. The Contractor agrees to report each violation to the School Unit and understands and agrees that the School Unit will, in turn, report each violation as required to the applicable federal awarding agency and the Regional Office of the Environmental Protection Agency. The Contractor agrees to include this requirement in each subcontract exceeding \$150,000 financed in whole or in part with a federal award.
  - B. <u>Federal Water Pollution Control Act</u>. The Contractor agrees to comply with all applicable standards, orders, or regulations issued pursuant to the Federal Water Pollution Control Act, as amended, 33 U.S.C. §§ 1251 *et seq*. The Contractor agrees to report each violation to the School Unit and understands and agrees that the School Unit will, in turn, report each violation as required to the applicable federal awarding agency and the Regional Office of the Environmental Protection Agency. The Contractor agrees to include this requirement in each subcontract exceeding \$150,000 financed in whole or in part with a federal award.

#### VIII. Additional Provisions Applicable to Construction Contracts.

A. <u>Equal Employment Opportunity</u>. If the Contract involves the construction, rehabilitation, alteration, conversion, extension, demolition, or repair of buildings, highways, or other changes or improvements to real properties (including facilities providing utility services), including the supervision, inspection, and other onsite functions incidental to the actual construction

(a "federally assisted construction contract," as defined in 60 CFR § 1.3) and except as otherwise provided under 41 CFR Part 60, during the performance of the Contract, the Contractor agrees as follows:

- 1. The Contractor will not discriminate against any employee or applicant for employment because of race, color, religion, sex, sexual orientation, gender identity, or national origin. The contractor will take affirmative action to ensure that applicants are employed, and that employees are treated during employment without regard to their race, color, religion, sex, sexual orientation, gender identity, or national origin. Such action shall include, but not be limited to the following: Employment, upgrading, demotion, or transfer; recruitment or recruitment advertising; layoff or termination; rates of pay or other forms of compensation; and selection for training, including apprenticeship. The Contractor agrees to post in conspicuous places, available to employees and applicants for employment, notices to be provided setting forth the provisions of this nondiscrimination clause.
- 2. The Contractor will, in all solicitations or advertisements for employees placed by or on behalf of the Contractor, state that all qualified applicants will receive consideration for employment without regard to race, color, religion, sex, sexual orientation, gender identity, or national origin.
- 3. The Contractor will not discharge or in any other manner discriminate against any employee or applicant for employment because such employee or applicant has inquired about, discussed, or disclosed the compensation of the employee or applicant or another employee or applicant. This provision shall not apply to instances in which an employee who has access to the compensation information of other employees or applicants as a part of such employee's essential job functions discloses the compensation of such other employees or applicants to individuals who do not otherwise have access to such information, unless such disclosure is in response to a formal complaint or charge, in furtherance of an investigation, proceeding, hearing, or action, including an investigation conducted by the employer, or is consistent with the contractor's legal duty to furnish information.
- 4. The Contractor will send to each labor union or representative of workers with which the Contractor has a collective bargaining agreement or other contract or understanding, a notice to be provided advising the said labor union or workers' representatives of the Contractor's commitments under this section, and shall post copies of the notice in conspicuous places available to employees and applicants for employment.
- 5. The Contractor will comply with all provisions of Executive Order 11246 of September 24, 1965, and of the rules, regulations, and relevant orders of the Secretary of Labor.
- 6. The Contractor will furnish all information and reports required by Executive Order 11246 of September 24, 1965, and by rules, regulations, and orders of the Secretary of Labor, or pursuant thereto, and will permit access to the Contractor's books, records, and accounts by the administering agency, as defined in 41 CFR § 60-1.3, and the U.S. Secretary of Labor for purposes of investigation to ascertain compliance with such rules, regulations, and orders.
- 7. In the event of the Contractor's noncompliance with the nondiscrimination clauses of this Contract or with any of the said rules, regulations, or orders, this Contract may be canceled, terminated, or suspended in whole or in part and the Contractor may be declared ineligible for further U.S. Government contracts or federally assisted construction contracts in accordance with procedures authorized in Executive Order 11246 of September 24, 1965, and such other sanctions may be imposed and remedies invoked as provided in Executive Order 11246 of September 24, 1965, or by rule, regulation, or order of the Secretary of Labor, or as otherwise provided by law.

- 8. The Contractor will include the portion of the sentence immediately preceding paragraph (1) and the provisions of paragraphs (1) through (8) in every subcontract or purchase order unless exempted by rules, regulations, or orders of the Secretary of Labor issued pursuant to section 204 of Executive Order 11246 of September 24, 1965, so that such provisions will be binding upon each subcontractor or vendor. The Contractor will take such action with respect to any subcontract or purchase order as the administering agency may direct as a means of enforcing such provisions, including sanctions for noncompliance; *provided, however*, that in the event the Contractor becomes involved in, or is threatened with, litigation with a subcontractor or vendor as a result of such direction by the administering agency, the contractor may request the United States to enter into such litigation to protect the interests of the United States.
- B. <u>Davis-Bacon Act</u>. If the contract price exceeds \$2,000 and the Contract involves construction, alteration, or repair (including painting and decorating) that requires or involves the employment of mechanics or laborers (including apprentices), the Contractor agrees as follows.

Terms used in this subsection B shall have the meanings set forth in 29 CFR § 5.2.

For purposes of this Section VIII.B, the appropriate federal agency is th U.S. Department of Education, acting by and through the Maine Department of Education.

- 1. <u>Minimum wages.</u>
  - All laborers and mechanics employed or working upon the site of the work (or (i) under the United States Housing Act of 1937 or under the Housing Act of 1949 in the construction or development of the project), will be paid unconditionally and not less often than once a week, and without subsequent deduction or rebate on any account (except such payroll deductions as are permitted by regulations issued by the Secretary of Labor under the Copeland Act (29 CFR part 3)), the full amount of wages and bona fide fringe benefits (or cash equivalents thereof) due at time of payment computed at rates not less than those contained in the wage determination of the Secretary of Labor, which is attached hereto and made a part hereof, regardless of any contractual relationship which may be alleged to exist between the contractor and such laborers and mechanics. Contributions made or costs reasonably anticipated for bona fide fringe benefits under section 1(b)(2) of the Davis-Bacon Act on behalf of laborers or mechanics are considered wages paid to such laborers or mechanics, subject to the provisions of paragraph (1)(iv) of this section; also, regular contributions made or costs incurred for more than a weekly period (but not less often than quarterly) under plans, funds, or programs which cover the particular weekly period, are deemed to be constructively made or incurred during such weekly period. Such laborers and mechanics shall be paid the appropriate wage rate and fringe benefits on the wage determination for the classification of work actually performed, without regard to skill, except as provided in (4). Laborers or mechanics performing work in more than one classification may be compensated at the rate specified for each classification for the time actually worked therein: Provided, That the employer's payroll records accurately set forth the time spent in each classification in which work is performed. The wage determination (including any additional classification and wage rates conformed under paragraph (1)(ii) of this section) and the Davis-Bacon poster (WH-1321) shall be posted at all times by the contractor and its subcontractors at the site of the work in a prominent and accessible place where it can be easily seen by the workers.
  - (ii)
- (A) The contracting officer shall require that any class of laborers or mechanics, including helpers, which is not listed in the wage

determination and which is to be employed under the contract shall be classified in conformance with the wage determination. The contracting officer shall approve an additional classification and wage rate and fringe benefits therefore only when the following criteria have been met:

- (1) The work to be performed by the classification requested is not performed by a classification in the wage determination; and
- (2) The classification is utilized in the area by the construction industry; and
- (3) The proposed wage rate, including any bona fide fringe benefits, bears a reasonable relationship to the wage rates contained in the wage determination.
- (B) If the contractor and the laborers and mechanics to be employed in the classification (if known), or their representatives, and the contracting officer agree on the classification and wage rate (including the amount designated for fringe benefits where appropriate), a report of the action taken shall be sent by the contracting officer to the Administrator of the Wage and Hour Division, U.S. Department of Labor, Washington, DC 20210. The Administrator, or an authorized representative, will approve, modify, or disapprove every additional classification action within 30 days of receipt and so advise the contracting officer or will notify the contracting officer within the 30-day period that additional time is necessary.
- (C) In the event the contractor, the laborers or mechanics to be employed in the classification or their representatives, and the contracting officer do not agree on the proposed classification and wage rate (including the amount designated for fringe benefits, where appropriate), the contracting officer shall refer the questions, including the views of all interested parties and the recommendation of the contracting officer, to the Administrator for determination. The Administrator, or an authorized representative, will issue a determination within 30 days of receipt and so advise the contracting officer or will notify the contracting officer within the 30-day period that additional time is necessary.
- (D) The wage rate (including fringe benefits where appropriate) determined pursuant to paragraphs (1)(ii) (B) or (C) of this section, shall be paid to all workers performing work in the classification under this contract from the first day on which work is performed in the classification.
- (iii) Whenever the minimum wage rate prescribed in the contract for a class of laborers or mechanics includes a fringe benefit which is not expressed as an hourly rate, the contractor shall either pay the benefit as stated in the wage determination or shall pay another bona fide fringe benefit or an hourly cash equivalent thereof.
- (iv) If the contractor does not make payments to a trustee or other third person, the contractor may consider as part of the wages of any laborer or mechanic the amount of any costs reasonably anticipated in providing bona fide fringe benefits under a plan or program, *Provided*, That the Secretary of Labor has found, upon the written request of the contractor, that the applicable standards of the Davis-Bacon Act have been met. The Secretary of Labor may require the

#### **CONTRACT ADDENDUM - 6**

contractor to set aside in a separate account assets for the meeting of obligations under the plan or program.

- 2. Withholding. The School Unit shall upon its own action or upon written request of an authorized representative of the Department of Labor withhold or cause to be withheld from the contractor under this contract or any other Federal contract with the same prime contractor, or any other federally-assisted contract subject to Davis-Bacon prevailing wage requirements, which is held by the same prime contractor, so much of the accrued payments or advances as may be considered necessary to pay laborers and mechanics, including apprentices, trainees, and helpers, employed by the contractor or any subcontractor the full amount of wages required by the contract. In the event of failure to pay any laborer or mechanic, including any apprentice, trainee, or helper, employed or working on the site of the work (or under the United States Housing Act of 1937 or under the Housing Act of 1949 in the construction or development of the project), all or part of the wages required by the contract, the School Unit may, after written notice to the contractor, sponsor, applicant, or owner, take such action as may be necessary to cause the suspension of any further payment, advance, or guarantee of funds until such violations have ceased.
- 3. <u>Payrolls and basic records.</u>
  - (i) Payrolls and basic records relating thereto shall be maintained by the contractor during the course of the work and preserved for a period of three years thereafter for all laborers and mechanics working at the site of the work (or under the United States Housing Act of 1937, or under the Housing Act of 1949, in the construction or development of the project). Such records shall contain the name, address, and social security number of each such worker, his or her correct classification, hourly rates of wages paid (including rates of contributions or costs anticipated for bona fide fringe benefits or cash equivalents thereof of the types described in section 1(b)(2)(B) of the Davis-Bacon Act), daily and weekly number of hours worked, deductions made and actual wages paid. Whenever the Secretary of Labor has found under 29 CFR 5.5(a)(1)(iv) that the wages of any laborer or mechanic include the amount of any costs reasonably anticipated in providing benefits under a plan or program described in section 1(b)(2)(B) of the Davis-Bacon Act, the contractor shall maintain records which show that the commitment to provide such benefits is enforceable, that the plan or program is financially responsible, and that the plan or program has been communicated in writing to the laborers or mechanics affected, and records which show the costs anticipated or the actual cost incurred in providing such benefits. Contractors employing apprentices or trainees under approved programs shall maintain written evidence of the registration of apprenticeship programs and certification of trainee programs, the registration of the apprentices and trainees, and the ratios and wage rates prescribed in the applicable programs.
  - (ii)
- (A) The contractor shall submit weekly for each week in which any contract work is performed a copy of all payrolls to the appropriate federal agency if the agency is a party to the contract, but if the agency is not such a party, the contractor will submit the payrolls to the applicant, sponsor, or owner, as the case may be, for transmission to the agency. The payrolls submitted shall set out accurately and completely all of the information required to be maintained under 29 CFR 5.5(a)(3)(i), except that full social security numbers and home addresses shall not be included on weekly transmittals. Instead the payrolls shall only need to include an individually identifying number

for each employee (e.g., the last four digits of the employee's social security number). The required weekly payroll information may be submitted in any form desired. Optional Form WH-347 is available for this purpose from the Wage and Hour Division Web site at http://www.dol.gov/esa/whd/forms/wh347instr.htm or its successor site. The prime contractor is responsible for the submission of copies of payrolls by all subcontractors. Contractors and subcontractors shall maintain the full social security number and current address of each covered worker, and shall provide them upon request to the appropriate federal agency if the agency is a party to the contract, but if the agency is not such a party, the contractor will submit them to the applicant, sponsor, or owner, as the case may be, for transmission to the agency, the contractor, or the Wage and Hour Division of the Department of Labor for purposes of an investigation or audit of compliance with prevailing wage requirements. It is not a violation of this section for a prime contractor to require a subcontractor to provide addresses and social security numbers to the prime contractor for its own records, without weekly submission to the sponsoring government agency (or the applicant, sponsor, or owner).

- (B) Each payroll submitted shall be accompanied by a "Statement of Compliance," signed by the contractor or subcontractor or his or her agent who pays or supervises the payment of the persons employed under the contract and shall certify the following:
  - That the payroll for the payroll period contains the information required to be provided under §5.5 (a)(3)(ii) of Regulations, 29 CFR part 5, the appropriate information is being maintained under §5.5 (a)(3)(i) of Regulations, 29 CFR part 5, and that such information is correct and complete;
  - (2) That each laborer or mechanic (including each helper, apprentice, and trainee) employed on the contract during the payroll period has been paid the full weekly wages earned, without rebate, either directly or indirectly, and that no deductions have been made either directly or indirectly from the full wages earned, other than permissible deductions as set forth in Regulations, 29 CFR part 3;
  - (3) That each laborer or mechanic has been paid not less than the applicable wage rates and fringe benefits or cash equivalents for the classification of work performed, as specified in the applicable wage determination incorporated into the contract.
- (C) The weekly submission of a properly executed certification set forth on the reverse side of Optional Form WH-347 shall satisfy the requirement for submission of the "Statement of Compliance" required by paragraph (a)(3)(ii)(B) of this section.
- (D) The falsification of any of the above certifications may subject the contractor or subcontractor to civil or criminal prosecution under section 1001 of title 18 and section 231 of title 31 of the United States Code.
- (iii) The contractor or subcontractor shall make the records required under paragraph (a)(3)(i) of this section available for inspection, copying, or transcription by authorized representatives of the appropriate federal agency or the Department of Labor, and shall permit such representatives to interview employees during

working hours on the job. If the contractor or subcontractor fails to submit the required records or to make them available, the Federal agency may, after written notice to the contractor, sponsor, applicant, or owner, take such action as may be necessary to cause the suspension of any further payment, advance, or guarantee of funds. Furthermore, failure to submit the required records upon request or to make such records available may be grounds for debarment action pursuant to 29 CFR 5.12.

- 4. <u>Apprentices and trainees</u>—
  - Apprentices. Apprentices will be permitted to work at less than the (i) predetermined rate for the work they performed when they are employed pursuant to and individually registered in a bona fide apprenticeship program registered with the U.S. Department of Labor, Employment and Training Administration, Office of Apprenticeship Training, Employer and Labor Services, or with a State Apprenticeship Agency recognized by the Office, or if a person is employed in his or her first 90 days of probationary employment as an apprentice in such an apprenticeship program, who is not individually registered in the program, but who has been certified by the Office of Apprenticeship Training, Employer and Labor Services or a State Apprenticeship Agency (where appropriate) to be eligible for probationary employment as an apprentice. The allowable ratio of apprentices to journeymen on the job site in any craft classification shall not be greater than the ratio permitted to the contractor as to the entire work force under the registered program. Any worker listed on a payroll at an apprentice wage rate, who is not registered or otherwise employed as stated above, shall be paid not less than the applicable wage rate on the wage determination for the classification of work actually performed. In addition, any apprentice performing work on the job site in excess of the ratio permitted under the registered program shall be paid not less than the applicable wage rate on the wage determination for the work actually performed. Where a contractor is performing construction on a project in a locality other than that in which its program is registered, the ratios and wage rates (expressed in percentages of the journeyman's hourly rate) specified in the contractor's or subcontractor's registered program shall be observed. Every apprentice must be paid at not less than the rate specified in the registered program for the apprentice's level of progress, expressed as a percentage of the journeymen hourly rate specified in the applicable wage determination. Apprentices shall be paid fringe benefits in accordance with the provisions of the apprenticeship program. If the apprenticeship program does not specify fringe benefits, apprentices must be paid the full amount of fringe benefits listed on the wage determination for the applicable classification. If the Administrator determines that a different practice prevails for the applicable apprentice classification, fringes shall be paid in accordance with that determination. In the event the Office of Apprenticeship Training, Employer and Labor Services, or a State Apprenticeship Agency recognized by the Office, withdraws approval of an apprenticeship program, the contractor will no longer be permitted to utilize apprentices at less than the applicable predetermined rate for the work performed until an acceptable program is approved.
  - (ii) Trainees. Except as provided in 29 CFR 5.16, trainees will not be permitted to work at less than the predetermined rate for the work performed unless they are employed pursuant to and individually registered in a program which has received prior approval, evidenced by formal certification by the U.S. Department of Labor, Employment and Training Administration. The ratio of trainees to journeymen on the job site shall not be greater than permitted under the plan approved by the Employment and Training Administration. Every trainee must be paid at not less than the rate specified in the approved program

for the trainee's level of progress, expressed as a percentage of the journeyman hourly rate specified in the applicable wage determination. Trainees shall be paid fringe benefits in accordance with the provisions of the trainee program. If the trainee program does not mention fringe benefits, trainees shall be paid the full amount of fringe benefits listed on the wage determination unless the Administrator of the Wage and Hour Division determines that there is an apprenticeship program associated with the corresponding journeyman wage rate on the wage determination which provides for less than full fringe benefits for apprentices. Any employee listed on the payroll at a trainee rate who is not registered and participating in a training plan approved by the Employment and Training Administration shall be paid not less than the applicable wage rate on the wage determination for the classification of work actually performed. In addition, any trainee performing work on the job site in excess of the ratio permitted under the registered program shall be paid not less than the applicable wage rate on the wage determination for the work actually performed. In the event the Employment and Training Administration withdraws approval of a training program, the contractor will no longer be permitted to utilize trainees at less than the applicable predetermined rate for the work performed until an acceptable program is approved.

- (iii) *Equal employment opportunity.* The utilization of apprentices, trainees and journeymen under this part shall be in conformity with the equal employment opportunity requirements of Executive Order 11246, as amended, and 29 CFR part 30.
- 5. <u>Compliance with Copeland Act requirements</u>. The contractor shall comply with the requirements of 29 CFR part 3, which are incorporated by reference in this contract.
- 6. <u>Subcontracts</u>. The contractor or subcontractor shall insert in any subcontracts the clauses contained in 29 CFR 5.5(a)(1) through (10) and such other clauses as the appropriate federal agency may by appropriate instructions require, and also a clause requiring the subcontractors to include these clauses in any lower tier subcontracts. The prime contractor shall be responsible for the compliance by any subcontractor or lower tier subcontractor with all the contract clauses in 29 CFR 5.5.
- 7. <u>Contract termination: debarment</u>. A breach of the contract clauses in 29 CFR 5.5 may be grounds for termination of the contract, and for debarment as a contractor and a subcontractor as provided in 29 CFR 5.12.
- 8. <u>Compliance with Davis-Bacon and Related Act requirements</u>. All rulings and interpretations of the Davis-Bacon and Related Acts contained in 29 CFR parts 1, 3, and 5 are herein incorporated by reference in this contract.
- 9. <u>Disputes concerning labor standards</u>. Disputes arising out of the labor standards provisions of this contract shall not be subject to the general disputes clause of this contract. Such disputes shall be resolved in accordance with the procedures of the Department of Labor set forth in 29 CFR parts 5, 6, and 7. Disputes within the meaning of this clause include disputes between the contractor (or any of its subcontractors) and the contracting agency, the U.S. Department of Labor, or the employees or their representatives.
- 10. <u>Certification of eligibility</u>.
  - (i) By entering into this contract, the contractor certifies that neither it (nor he or she) nor any person or firm who has an interest in the contractor's firm is a person or firm ineligible to be awarded Government contracts by virtue of section 3(a) of the Davis-Bacon Act or 29 CFR 5.12(a)(1).

- (ii) No part of this contract shall be subcontracted to any person or firm ineligible for award of a Government contract by virtue of section 3(a) of the Davis-Bacon Act or 29 CFR 5.12(a)(1).
- (iii) The penalty for making false statements is prescribed in the U.S. Criminal Code, 18 U.S.C. 1001.
- C. <u>Contract Work Hours and Safety Standards Act</u>. If the total contract price exceeds \$100,000 and the Contract involves construction, alteration, or repair (including painting and decorating) that requires or involves the employment of mechanics or laborers (including apprentices), the Contractor agrees as follows.

Terms used in this subsection C shall have the meanings set forth in 29 CFR § 5.2. As used in this subsection C, the terms *laborers* and *mechanics* include watchmen and guards.

- 1. <u>Overtime requirements</u>. No contractor or subcontractor contracting for any part of the contract work which may require or involve the employment of laborers or mechanics shall require or permit any such laborer or mechanic in any workweek in which he or she is employed on such work to work in excess of forty hours in such workweek unless such laborer or mechanic receives compensation at a rate not less than one and one-half times the basic rate of pay for all hours worked in excess of forty hours in such workweek.
- 2. <u>Violation; liability for unpaid wages; liquidated damages</u>. In the event of any violation of the clause set forth in paragraph (1) of this section the contractor and any subcontractor responsible therefor shall be liable for the unpaid wages. In addition, such contractor and subcontractor shall be liable to the United States (in the case of work done under contract for the District of Columbia or a territory, to such District or to such territory), for liquidated damages. Such liquidated damages shall be computed with respect to each individual laborer or mechanic, including watchmen and guards, employed in violation of the clause set forth in paragraph (1) of this section, in the sum of \$27 for each calendar day on which such individual was required or permitted to work in excess of the standard workweek of forty hours without payment of the overtime wages required by the clause set forth in paragraph (1) of this section.
- 3. <u>Withholding for unpaid wages and liquidated damages</u>. The School Unit shall upon its own action or upon written request of an authorized representative of the Department of Labor withhold or cause to be withheld, from any moneys payable on account of work performed by the contractor or subcontractor under any such contract or any other Federal contract with the same prime contractor, or any other federally-assisted contract subject to the Contract Work Hours and Safety Standards Act, which is held by the same prime contractor, such sums as may be determined to be necessary to satisfy any liabilities of such contractor or subcontractor for unpaid wages and liquidated damages as provided in the clause set forth in paragraph (2) of this section.
- 4. <u>Subcontracts.</u> The contractor or subcontractor shall insert in any subcontracts the clauses set forth in paragraph (1) through (4) of this section and also a clause requiring the subcontractors to include these clauses in any lower tier subcontracts. The prime contractor shall be responsible for compliance by any subcontractor or lower tier subcontractor with the clauses set forth in paragraphs (1) through (4) of this section.

#### [SIGNATURE PAGE FOLLOWS]

IN WITNESS WHEREOF, the Parties have executed this ADDENDUM as of the date of the Contract.

SCHOOL UNIT

#### CONTRACTOR

BY:

Name: Title: BY:

Name: Title:

#### ADDENDUM TO CONTRACT FOR GOODS OR SERVICES USING FEDERAL AWARDS

#### EXHIBIT A

#### BYRD ANTI-LOBBYING CERTIFICATION

#### \* \* \* THIS CERTIFICATION MUST BE COMPLETED AND SUBMITTED TO THE SCHOOL UNIT IF THE CONTRACT PRICE EQUALS OR EXCEEDS \$100,000 \* \* \*

The Contractor certifies to the best of its knowledge and belief, that:

- 1. No federal appropriated funds have been paid or will be paid, by or on behalf of the Contractor, to any person for influencing or attempting to influence an officer or employee of any agency, a member of Congress, an officer or employee of Congress, or an employee of a member of Congress in connection with the awarding of any federal contract, the making of any federal grant, the making of any federal loan, the entering into of any cooperative agreement, and the extension, continuation, renewal amendment, or modification of any federal contract, grant, loan, or cooperative agreement.
- 2. If any funds other than Federal appropriated funds have been paid or will be paid to any person for influencing or attempting to influence an officer or employee of any agency, a member of Congress, an officer or employee of Congress, or an employee of a member of Congress in connection with this Federal contract, grant, loan, or cooperative agreement, the undersigned shall complete and submit Standard Form-LLL, "Disclosure Form to Report Lobbying," in accordance with its instructions. (Attach Standard Form-LLL, "Disclosure Form to Report Lobbying," to this certificate, if applicable.)
- 3. The Contractor shall require that the language of this certification be included in the award documents for all sub-awards at all tiers (including subcontracts, sub-grants, and contracts under grants, loans, and cooperative agreements) and that all sub-recipients shall certify and disclose accordingly.

By affixing a signature below, the Contractor certifies or affirms the truthfulness and accuracy of each statement of its certification and disclosure, if any. The Contractor certifies that this certification is a material representation of fact upon which reliance is placed by the School Unit. If it is later determined that the Contractor knowingly rendered an erroneous certification, in addition to other remedies available to the Federal Government, the School Unit may terminate this transaction for cause of default.

Submission of this certification is a requirement imposed by 31 U.S.C. § 1352, as amended by the Lobbying Disclosure Act of 1995.

Signature of Contractor's Authorized Official

Date

Printed Name and Title of Contractor's Authorized Official

Printed Name of Contractor

#### ADDENDUM TO CONTRACT FOR GOODS OR SERVICES USING FEDERAL AWARDS

#### EXHIBIT B

The applicable Davis-Bacon Act wage determination is attached hereto.

*Note: Wage determinations may be found at:* <u>https://sam.gov/search/?index=dbra&page=1&sort=-modifiedDate&sfm%5Bstatus%5D%5Bis\_active%5D=true</u>

## **APPENDIX B**

# **Davis-Bacon Act Certification**
### **Davis-Bacon Act Certification**

Owner:	
Contractor or: Subcontractor	
Project:	
Contract date:	

The undersigned Contractor/Subcontractor certifies under penalty of perjury that, during the period covered by the application for payment to which this certification is attached, all laborers, mechanics, and apprentices employed or working on the site of the Project have been paid wages and fringe benefits in compliance with the Davis-Bacon Act.

I further certify that, to the extent that payroll information has not been provided for work on the site of the Project, such work was performed by a person(s) who:

- (i) is an owner of the Contractor/Subcontractor with at least a 20% interest in the Contractor/Subcontractor; and
- (ii) is actively engaged in the management of the Contractor/Subcontractor.

Dated:

(signature)

Print name:

Print title:

# **APPENDIX C**

# **Contract Provisions**

	Contract Provision	Threshold Contract Value
Equal Employment Opportunity.	Contract must include EEO contract provisions	All federally assisted construction contracts
Procurement of Recovered Materials	Contractor must make maximum use of EPA-designated recovered materials	All
Telecommunications Prohibition	Contractor may not procure or obtain telecom equipment produced by Huawei or ZTE	All
Davis-Bacon Act	Contract must include contract clauses regarding payment of prevailing wages and fringe benefits, including a	Construction contracts
Copeland "Anti-Kickback" Act	prevailing wage determination. Contract must also include provisions prohibiting kickbacks.	> \$2,000
Termination for Cause and Convenience	Contracts must address termination for cause and convenience by School Unit, including legal remedies	> \$10,000
Debarment	Contractor or subs may not be a party, or engage any party, that is debarred or suspended (www.sam.gov)	> \$25,000
Contract Work Hours and Safety Standards Act	Contractors and subs must time-and-a half for work exceeding 40 hours/week	Construction contracts > \$100,000
Byrd Anti-Lobbying Amendment	Contractor or subs may not use federal funds for lobbying and must file an anti-lobbying certification with the School Unit	> \$100,000
Remedies for Contractor Breach	Contracts must address administrative, contractual, or legal remedies for Contractor's breach of contract	> \$150,000
Clean Air and Clean Water Acts	Contractor and subs must comply with the Clean Air Act and Federal Water Pollution Control Act	> \$150,000

# APPENDIX D

# **Optional Payroll Spreadsheet**

#### **U.S. Department of Labor**

### PAYROLL

Wage and Hour Division

PAYROLL NO.

#### (For Contractor's Optional Use; See Instructions at www.dol.gov/whd/forms/wh347instr.htm)

Persons are not required to respond to the collection of information unless it displays a currently valid OMB control number.

NAME OF CONTRACTOR

OR SUBCONTRACTOR

FOR WEEK ENDING

ADDRESS

PROJECT AND LOCATION

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While completion of Form WH-347 is optional, it is mandatory for covered contractors and subcontractors performing work on Federally financed or assisted construction contracts to respond to the information collection contractors and subcontractors performing work on Federally financed or assisted construction contracts to respond to the information collection contractors and subcontractors performing work on Federally financed or assisted construction contracts to respond to the information collection contractors and subcontractors performing work on Federally financed or assisted construction contracts to respond to the information collection contractors and subcontractors performing work on Federally financed or assisted construction contracts to respond to the information collection contractors and subcontractors performing work on Federally financed or assisted construction contracts to respond to the information collection contractors and subcontractors performing work on Federally financed or assisted construction contracts to respond to the information collection contractors and subcontractors performing work on Federally financed or assisted construction contracts to respond to the information collection contractors and subcontractors performing work on Federally financed or assisted construction contracts to respond to the information collection contractors and subcontractors performing work on Federal performance on the information contractors and subcontractors and subcontracto (40 U.S.C. § 3145) contractors and subcontractors performing work on Federally financed or assisted construction contracts to "furnish weekly a statement with respect to the wages paid each employee during the preceding week." U.S. Department of Labor (DOL) regulations at 29 C.F.R. § 5.5(a)(3)(ii) require contractors to submit weekly a copy of all payrolls to the Federal agency contracting for or financing the construction project, accompanied by a signed "Statement of Compliance" indicating that the payrolls are correct and complete and that each laborer or mechanic has been paid not less than the proper Davis-Bacon prevailing wage rate for the work performed. DOL and federal contracting agencies receiving this information review the information to determine that employees have received legally required wages and fringe benefits.

#### Public Burden Statement

We estimate that is will take an average of 55 minutes to complete this collection, including time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. If you have any comments regarding these estimates or any other aspect of this collection, including suggestions for reducing this burden, send them to the Administrator, Wage and Hour Division, U.S. Department of Labor, Room S3502, 200 Constitution Avenue, N.W. Washington, D.C. 20210

U.S. Wage and Hour Division

OMB No.:1235-0008 Expires: 05/31/2021

Rev. Dec. 2008

### Date (Name of Signatory Party) (Title) do hereby state: (1) That I pay or supervise the payment of the persons employed by on the (Contractor or Subcontractor) ; that during the payroll period commencing on the (Building or Work) dav of \_\_\_\_\_, \_\_\_\_, and ending the \_\_\_\_\_ day of \_\_\_\_\_\_ , , , all persons employed on said project have been paid the full weekly wages earned, that no rebates have been or will be made either directly or indirectly to or on behalf of said from the full

(Contractor or Subcontractor)

weekly wages earned by any person and that no deductions have been made either directly or indirectly from the full wages earned by any person, other than permissible deductions as defined in Regulations, Part 3 (29 C.F.R. Subtitle A), issued by the Secretary of Labor under the Copeland Act, as amended (48 Stat. 948, 63 Stat. 108, 72 Stat. 967; 76 Stat. 357; 40 U.S.C. § 3145), and described below:

(2) That any payrolls otherwise under this contract required to be submitted for the above period are correct and complete: that the wage rates for laborers or mechanics contained therein are not less than the applicable wage rates contained in any wage determination incorporated into the contract; that the classifications set forth therein for each laborer or mechanic conform with the work he performed.

(3) That any apprentices employed in the above period are duly registered in a bona fide apprenticeship program registered with a State apprenticeship agency recognized by the Bureau of Apprenticeship and Training, United States Department of Labor, or if no such recognized agency exists in a State, are registered with the Bureau of Apprenticeship and Training, United States Department of Labor.

(4) That:

(a) WHERE FRINGE BENEFITS ARE PAID TO APPROVED PLANS, FUNDS, OR PROGRAMS

- in addition to the basic hourly wage rates paid to each laborer or mechanic listed in the above referenced payroll, payments of fringe benefits as listed in the contract have been or will be made to appropriate programs for the benefit of such employees. except as noted in section 4(c) below.

# REMARKS: NAME AND TITLE SIGNATURE THE WILLFUL FALSIFICATION OF ANY OF THE ABOVE STATEMENTS MAY SUBJECT THE CONTRACTOR OR SUBCONTRACTOR TO CIVIL OR CRIMINAL PROSECUTION. SEE SECTION 1001 OF TITLE 18 AND SECTION 231 OF TITLE 31 OF THE UNITED STATES CODE.

#### (b) WHERE FRINGE BENEFITS ARE PAID IN CASH

- Each laborer or mechanic listed in the above referenced payroll has been paid. as indicated on the payroll, an amount not less than the sum of the applicable basic hourly wage rate plus the amount of the required fringe benefits as listed in the contract, except as noted in section 4(c) below.

#### (c) EXCEPTIONS

EXCEPTION (CRAFT)

EXPLANATION

# **APPENDIX E**

Plans & Specs Base Bid

#### **SECTION 311100**

#### 1 GENERAL

#### 1.01 SECTION INCLUDES

- A. Provide labor and materials to complete the earthwork within the limit of work as shown on the Drawings and/or herein specified.
  - 1. Aggregates
  - 2. Cement
  - 3. Water
  - 4. Admixtures
  - 5. Air Entraining Admixtures
  - 6. Fly-Ash
  - 7. Plasticizers
  - 8. Water Reducing Admixture
  - 9. Accelerating Admixtures
  - 10. Bonding Agent
  - 11. Mortar
  - 12. Finishing Grout/Plaster
  - 13. Curing Compound
  - 14. Plastic Film Moisture Barrier
  - 15. Mix Proportion
  - 16. Mixing and Delivery
  - 17. Placing Concrete
  - 18. Jointing
  - 19. Finishing
  - 20. Curing Concrete
  - 21. Cold Weather Concreting
  - 22. Hot Weather Concreting

#### 1.01 PROTECTION

- A. Provide protection stipulated in specification 311110 Site Preparation.
- B. Shoring: Do shoring, bracing, etc., necessary to support soil adjoining the excavation, in compliance with OSHA and all other Federal, State, and local codes.
- C. Protect structures, utilities, sidewalks, culverts, pavements, and other facilities from damage caused by settlement, lateral movement, undermining, washout and other hazards created by earthwork operations. Repair, or have repaired, all damage to existing utilities, structures, culverts, pavement, lawns, other public and private property which results from construction operations, at no additional expense to the Owner, to the complete satisfaction of the utility, the property owner, and the Owner.

#### 1.02 REFERENCED DOCUMENTS

- A. Applicable provisions of Division 1 shall govern all work under this section.
- B. American Concrete Institute
  - ACI 117 Specifications for Tolerances for Concrete Construction and Materials
  - ACI 304 Guide to Measuring, Mixing, Transporting and Placing Concrete
  - ACI 305 Hot Weather Concreting
  - ACI 306 Cold Weather Concreting
  - ACI 308 Guide to Curing Concrete



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C. American Society for Testing and Materials (ASTM)

C31M-08b	Standard Practice for Making and Curing Concrete Test Specimens in the Field
C33M-08	Standard Specifications for Concrete Aggregates
C39M-05e2	Standard Test Methods for Compressive Strength of Cylindrical Concrete Specimens
C143M-08	Standard Test Methods for Slump of Hydraulic Cement Concrete
C150-07	Standard Specifications for Portland Cement
C171-07	Standard Specifications for Sheet Materials for Curing Concrete
C172-08	Standard Practice for Sampling Freshly Mixed Concrete
C231-08c	Standard Test Methods for Air Content of Freshly Mixed Concrete by the Pressure
Method	
C260-06	Standard Specifications for Air-Entraining Admixtures for Concrete
C309-07	Standard Specifications for Liquid Membrane Forming Compound for Curing Concrete
C494M-08a	Standard Specifications for Chemical Admixtures for Concrete
C618-08a	Standard Specifications for Coal Fly Ash and Raw or Calcined Natural Pozzolan for Use
as a Mineral A	dmixture in Portland Cement Concrete
C1017M-07	Standard Specifications for Chemical Admixtures for Use in Producing Flowing Concrete

D. Concrete Reinforcing Steel Institute (CRSI) MSP-1-97 Manual of Standard Practice

#### 2 PRODUCTS

#### 2.01 AGGREGATES

A. Durable aggregate material meeting the requirements of ASTM C33M-08. Aggregates used in concrete shall be from the same source and of same gradation as those used to prepare mixture proportion samples for compressive strength testing.

#### 2.02 CEMENT

- A. Portland cement meeting the requirements of ASTM C150-07, Type I.
- 2.03 WATER
  - A. Potable water.

#### 2.04 ADMIXTURES - GENERAL

- A. Unless otherwise approved, admixtures shall be free of chloride ions.
- B. Admixtures used in concrete shall be the same as those used in the approved mixture proportion sample.

#### 2.05 AIR ENTRAINING ADMIXTURES

- A. Air entraining admixtures shall meet the requirements of ASTM C260.
- 2.06 FLY ASH
  - A. Fly ash and raw or calcined natural pozzolan shall meet the requirements of ASTM C618-08a, Type C.
- 2.07 PLASTICIZERS



A. Plasticizers shall meet the requirements of ASTME C1017M-07.

#### 2.08 WATER REDUCING, ACCELERATED, AND COMBINED ADMIXTURES

A. Water reducing, accelerated, and combined admixtures shall meet the requirements of

ASTM C494M-08a.

- Type A Water Reducing
- Type B Accelerating
- Type C Water reducing and retarding
- Type E Water reducing and accelerating
- Type F Water reducing high range
- Type G Water reducing high range and retarding

#### 2.09 BONDING AGENT

- A. Acrylic latex emulsion bonding agent suitable for bonding new concrete to existing concrete or new concrete.
- 2.10 MORTAR
  - A. Cement based mortar.

#### 2.11 FINISHING GROUT/PLASTER

A. Cement based, aggregate type finishing grout. Finish color shall be grey.

#### 2.12 CURING COMPOUND

- A. Liquid membrane forming compound consisting of waxes, resins or other materials.
- B. Curing compounds shall meet the requirements of ASTM C309-07.
- C. Curing compounds shall be compatible with all other proposed concrete finishes.

#### 2.13 PLASTIC FILM MOISTURE BARRIER

- Polyethylene film having a minimum thickness of 4-mils, and meeting the requirements of ASTM C171-07.
- B. Plastic film moisture barrier used in summer months shall be clear or opaque white.

#### 3 EXECUTION

- 3.01 GENERAL
  - A. Prepare subgrade as required by the Drawings and other applicable specification sections.
  - B. Where new concrete meets existing pavement provide full depth sawcut, unless otherwise shown on the Drawings.

#### 3.02 MIX PROPORTION

Prepare mix proportion for each type of concrete listed on Table 03300-2, as necessary to complete the work.



		Min.		Min. Cement	Max. Water	Air
		Compressive	Slump	Content	Content	Content
Type	Use	Strength (psi)	(in)	(Bags/CY)	(Gal/CY)	(%Vol.)
CC	Manhole bases, blocking, cradles	3000 psi	1-4	5.5	32	3-5

#### Table 03300-2

#### 3.03 MIXING AND DELIVERY

- A. Use ready mixed concrete of type required for given application, and prepared in accordance with approved mix design.
- B. Deliver and discharge concrete within 1 <sup>1</sup>/<sub>2</sub> hours of initial mixing, or before 300 drum or blade revolutions.
- C. Do not add water on-site unless slump and water/cement ratio will be below the maximum after the addition of water. If water is added onsite, mix concrete an additional 30 revolutions.
- D. Temperature of concrete shall be maintained between 50 F and 90 F.
- E. If admixtures are added onsite, follow manufacturer's recommendations with regards to additional mixing.

#### 3.04 PLACING CONCRETE

- A. Place concrete in accordance with the most stringent of either ACI 304 or this section.
- B. Before placing concrete, remove debris, ice, snow, and other foreign materials from the subgrade or formwork.
- C. Remove standing water from subgrade. Dry and compact subgrade in accordance with the requirements of Division 2. Do not place concrete on soft or frozen subgrade.
- D. Place and secure steel reinforcement prior to placing concrete.
- E. Position and secure expansion joint material, sleeves, waterstops and other imbedded items prior to placing concrete. Place imbedded items in accordance with the most stringent of either drawings or manufacturer recommendations.
- F. Apply bonding agent to existing concrete surfaces requiring a bond with new concrete.
- G. Convey concrete from truck to final position by method that will prevent separation.
- H. Unless otherwise approved, limit free fall of concrete to 4' maximum height to avoid separation.
- I. Place concrete continuously so that concrete is deposited on or adjacent to concrete that is still plastic. When placing of concrete is temporarily halted or delayed, provide construction joints.
- J. Place concrete in lifts not exceeding 18".
- K. Consolidate concrete by mechanical vibration. Allow vibrator to penetrate the full depth of the slab or lift.
- L. Overlap previously vibrated areas by 25%.



#### 3.05 CURING

- A. Cure concrete in accordance with ACI 308.
- B. Start curing operations immediately after finishing is completed. Cure concrete for a minimum of 7 days.
- 3.08 COLD WEATHER CONCRETING
  - A. Complete cold weather (temperatures below 40 deg. F for 3 successive days) concreting in accordance with ACI 306.
- 3.09 HOT WEATHER CONCRETING
  - A. Complete hot weather concreting in accordance with ACI 305.



#### SECTION 311100

#### SITE PREPARATION

1 GENERAL

#### 1.01 SECTION INCLUDES

- A. Provide labor and materials to complete the earthwork within the limit of work as shown on the Drawings and/or herein specified.
  - 1. Clearing and preparation of site.
  - 2. Stripping of topsoil
  - 3. Stockpiling
  - 4. Protection.

#### 1.01 PROTECTION

- A. Prior to excavation, verify the underground utilities, pipes, structures, and facilities; utilizing at least the following minimum measures::
  - 1. Pre-mark the boundaries of your planned excavation with white paint, flags or stakes, so utility crews know where to mark their lines.
  - 2. Call Dig Safe, at 1-888-DIGSAFE, at least three business days but no more than 30 calendar days before starting work. Don't assume someone else will make the call.
  - 3. If blasting, notify Dig Safe at least one business day in advance.
  - 4. Wait three business days for lines to be located and marked with color-coded paint, flags or stakes. Note the color of the marks and the type of utilities they indicate. Transfer these marks to the As-Built drawings.
  - 5. Contact the landowner and other "non-member" utilities (water, sewer, gas, etc.), for them to mark the locations of their underground facilities. Transfer these marks to the As-Built drawings.
  - 6. Re-notify Dig Safe and the non-member utilities if the digging, drilling or blasting does not occur within 30 calendar days, or if the marks are lost due to weather conditions, site work activity or any other reason.
  - 7. Hand dig within 18 inches in any direction of any underground line until the line is exposed. Mechanical methods may be used for initial site penetration, such as removal of pavement or rock.
  - 8. Dig Safe requirements are in addition to town, city and/or state DOT street opening permit requirements.
  - 9. For complete Dig Safe requirements, call the PUC or visit their website.
  - 10. If you damage, dislocate or disturb any underground utility line, immediately notify the affected utility. If damage creates safety concerns, call the fire department and take immediate steps to safeguard health and property.
  - 11. Any time an underground line is damaged or disturbed, or if lines are improperly marked, you must file an Incident Report with the PUC. For an Incident Report form visit www.state.me.us/mpuc or call the PUC at 800-452-4699.
- B. Excavation, sidewalks, trenches, etc., shall be kept properly fenced and guarded. Lights shall be provided and maintained wherever and whenever necessary. Trees which are within the area of operations (and are to remain) shall be protected with suitable boarding or fencing.
- C. Shoring: Do shoring, bracing, etc., necessary to support soil adjoining the excavation in compliance with OSHA and all other Federal, State, and local codes.
- D. Protect newly filled areas from traffic and erosion. Repair and re-establish grades to the specified tolerances in settled, eroded and rutted areas. Where completed compacted areas are disturbed by subsequent construction operations or adverse weather, scarify the surface, re-shape and compact to the required density prior to further construction.
- E. Protect structures, utilities, sidewalks, culverts, pavements, and other facilities from damage caused by

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settlement, lateral movement, undermining, washout and other hazards created by earthwork operations. Repair, or have repaired, all damage to existing utilities, structures, culverts, pavement, lawns, other public and private property which results from construction operations, at no additional expense to the Owner, to the complete satisfaction of the utility, the property owner, and the Owner.

#### 1.02 QUALITY ASSURANCE

A. Materials used on-site are subject to the approval of the Owner and Geotechnical Engineer and unsuitable materials shall be removed from the site.

#### 2 PRODUCTS- Not Applicable

#### 3 EXECUTION

#### 3.01 CLEARING AND SITE PREPARATION

- A. Trees, brush, boulders, etc., within the limits of grading shall be removed from the site (except trees indicated as remaining or undisturbed) including grubbing and removal of organic material, stumps, and roots larger than 2" diameter and 3' long. Trees in the clearing area are to be removed by the Owner.
- B. Optional: stumps and roots in areas of fill, as noted on the site plans, may be left in place. Do not place roots and grubbings from other areas of the site here. Stumps and grubbings disturbed must be removed from the site.
- C. Remove debris and deposit it in suitable disposal areas as specified below. Conform to Federal, State and local solid waste disposal regulations.

#### 3.02 STRIPPING OF TOPSOIL

- A. Topsoil within areas where excavation or filling will occur shall be stripped, cleaned of all stumps, rocks, debris, and roots larger than 2" diameter or 3' long, and stockpiled on site for reuse. Much of the area previously filled does not have topsoil.
- B. Prior to re-use as finished loam, topsoil must conform to the requirements of Section 329113. Soil which does not meet these requirements, either naturally, or by additives supplied by the Contractor, shall not be used as finished loam. When approved the Owner, this material can be used in place of common borrow.

#### 3.03 STOCKPILES

- A. On-site stockpiles are temporary. Unless allowed by 311110.3.02, 311110.3.03.B, or the Owner in writing, stockpiles shall be removed from the site.
- B. Keep debris stockpiles out of public sight when practicable.
- C. Do not stockpile immediately adjacent to buildings, retaining walls, ponds, or other areas subject to potential landslides or damage.

#### 3.04 DISPOSAL

A. Dispose of unsuitable material, organic material, wood waste, and rock material, off the site in a disposal area obtained by the Contractor. Conform to Federal, State and local solid waste disposal regulations. Spread suitable surplus excavated soil on site in areas directed by the Owner.



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B. If hazardous waste or special waste as defined by the U. S. Environmental Protection Agency or State Department of Environmental Protection is encountered during excavation, the Contractor shall avoid disturbance of that material, and shall notify the Owner immediately. The State Bureau of Oil and Hazardous Waste Control must be notified and consulted prior to disturbance of the waste or contaminated soil. Removal and disposal of contaminated materials is not included in the Contract Bid, since it must be handled as directed by the regulatory agencies on a case-by-case basis.

#### 3.05 REMOVAL OF EXISTING BITUMINOUS PAVEMENT

- A. Where it is necessary to excavate and make cuts in bituminous pavement, the Contractor shall saw cut paving along neat straight lines where new pavement meets existing pavement.
- B. Dispose of excavated pavement in suitable off-site recycling disposal area obtained by the Contractor.



### SECTION 312316

#### 1 GENERAL

#### 1.01 SECTION INCLUDES

- A. Provide labor and materials to complete the earthwork within the limit of work as shown on the Drawings and/or herein specified.
  - 1. Protection.
  - 2. Excavation:
    - a. General excavation to lines and grades indicated.
    - b. Trench excavation for footings, piers, etc.
    - c. Excavation for buried pipes, wires and conduits under ground floor.
    - d. Excavation for buried structures, tanks, pipes, wires and conduits outside the building.
  - 3. General exterior rough grading, cutting and filling as required.
  - 4. Filling and backfilling for excavations, including furnishing of extra material required.
  - 5. Shoring, bracing, sheathing, and cribbing as required and removal of the same.
  - 6. Pumping of excavation as may be required.
  - 7. Crushed stone
- B. Quantity Allowance:
  - 1. Allow the quantity of 1,000 cubic yards of common borrow to meet the design grades.
  - 2. Actual quantities differing from the quantity allowance will be adjusted according to the unit prices set forth in the Bid Form. Section 01020 specifies the allowance procedures.
  - 3. Fill material may be available and delivered to the site by other contractors from other nearby Owner projects. The entire 1000 cubic yards may be delivered to the site prior to construction start. The contractor price must be adjusted by the unit price on the bid form for fill delivered to the site prior to project start and prior to project filling.
  - 4. Additional fill material may be delivered as noted above, in addition to the 1,000 cubic yard allowance. Additional fill shall be used to flatten the slope grades, as noted on the plans. The contractor price must be adjusted by the corresponding price on the bid form for fill delivered to the site.
  - 5. Coordinate filling quantities with the owner prior to completing the work.

#### 1.02 SUBMITTALS

A. Submit manufacturer's product literature and test results for approval on all materials. Make submissions in accordance with Division 1 Submittals section.

#### 1.03 PROTECTION

- A. Prior to excavation, verify the underground utilities, pipes, structures, and facilities; utilizing at least the following minimum measures::
  - 6. Pre-mark the boundaries of your planned excavation with white paint, flags or stakes, so utility crews know where to mark their lines.
  - 2. Call Dig Safe, at 1-888-DIGSAFE, at least three business days but no more than 30 calendar days before starting work. Don't assume someone else will make the call.
  - 7. If blasting, notify Dig Safe at least one business day in advance.
  - 8. Wait three business days for lines to be located and marked with color-coded paint, flags or stakes. Note the color of the marks and the type of utilities they indicate. Transfer these marks to the As-Built drawings.
  - 9. Contact the landowner and other "non-member" utilities (water, sewer, gas, etc.), for them to mark



the locations of their underground facilities. Transfer these marks to the As-Built drawings.

- 10. Re-notify Dig Safe and the non-member utilities if the digging, drilling or blasting does not occur within 30 calendar days, or if the marks are lost due to weather conditions, site work activity or any other reason.
- 11. Hand dig within 18 inches in any direction of any underground line until the line is exposed. Mechanical methods may be used for initial site penetration, such as removal of pavement or rock.
- 12. Dig Safe requirements are in addition to town, city and/or state DOT street opening permit requirements.
- 13. For complete Dig Safe requirements, call the PUC or visit their website.
- 14. If you damage, dislocate or disturb any underground utility line, immediately notify the affected utility. If damage creates safety concerns, call the fire department and take immediate steps to safeguard health and property.
- 15. Any time an underground line is damaged or disturbed, or if lines are improperly marked, you must file an Incident Report with the PUC. For an Incident Report form visit www.state.me.us/mpuc or call the PUC at 800-452-4699.
- B. Perform protection work as detailed in Specification 311110 Site Preparation.

#### 1.04 QUALITY ASSURANCE

- A. Compaction Control: Wherever a percentage of compaction for backfill is indicated or specified, it shall be the in-place dry density divided by the maximum dry density and multiplied by 100.
- B. The maximum dry density shall be the dry density at optimum moisture as determined by ASTM D 1557-91 "Test Method for Laboratory Compaction Characteristics of Soil Using Modified Effort," latest revision. Method A, B or C shall be selected by the testing agency based on the gradation results of the sample taken. Adjustments to the laboratory density for oversize aggregate shall be made (if required) as specified in ASTM D 1557-91. These adjustments shall be made in accordance with ASTM D 4718-87, latest revision.
- C. The in-place density shall be determined in accordance with ASTM Standard Method of Test for Density of Soil in Place by the Sand Cone Method, Designation D 1556; or density of soil and soil aggregate in-place by nuclear methods (shallow depth), Designation D2922.
- D. Materials used on-site are subject to the approval of the Owner and Geotechnical Engineer and unsuitable materials shall be removed from the site.
- E. Note: a geotechnical evaluation of the existing site conditions was not performed by the Owner. If the existing site shows any indication of instability, including but not limited to erosion, cracking, sliding, global instability, shifting, or slump, stop work immediately and contact the Owner immediately.

#### 1.05 MEASUREMENTS AND CLASSIFICATION

- A. Measurements: Measurements used for calculating amounts of excavation shall be within a vertical line placed 2'-0" outside the wall or 1'-0" outside footing, whichever is greater, and to the depth indicated. Trench excavation for underground utilities shall be based on a trench width 2'-6" greater than the diameter of the pipe with vertical walls, and the depth of 4" below the pipe. Excavation shall be taken to a minimum of 1'-0" below finish floor, and slabs on grade, unless a different backfill thickness is indicated.
- B. Classification:
  - 1. Earth excavation includes any and all material not having the qualities to classify as rock excavation.
  - 2. Rock excavation includes the satisfactory removal and disposal of solid rock material which cannot be removed without systematic drilling and blasting. This includes rock material which is

in ledges, bedded deposits, unstratified masses, and conglomerate deposits which are so firmly cemented that they possess the characteristics of solid rock. Fragmented "weathered" rock which can be removed by excavation equipment with "ripper" teeth will be considered earth. Boulders will be included only if each is two (2) cubic yard size or greater and cannot be excavated without drilling and blasting or pneumatic splitting. When, during the progress of excavation, ledge is encountered, the Owner shall be notified. Adjustments will be by unit price. The Owner shall determine the extent of rock excavation and classification.

- 3. The unit price for rock excavation is net and is not subject to credit for any other material which it may replace.
- 4. Excavation which measures 6'-0" or less in width, regardless of length, shall be classified as trench excavation. Measurements to be determined as outlined herein.
- 5. Excavation which does not meet the above requirements for trench excavation shall be classified as open excavation.
- 6. The Owner will take credit for excavation and/or fill omitted through changes from the Plans and/or Specifications at the unit price stated.
- C. Rock excavation shall not be included under the basic Contract Price. The project is nearly entirely fill work or excavation in existing fill. Should the contractor encounter rock as defined above, contact the Owner.

#### 1.06 SOIL TESTING

- A. Soil compaction control including laboratory testing and on site testing, will be done by a testing agency hired by the Owner.
- B. Tests of soil as delivered may be performed from time to time. Materials in question may not be used, pending test results. Remove rejected material and replace with new, approved soil.
- C. Cooperate with the laboratory in obtaining field samples of in-place, bank-run, or stockpiled materials. Samples should be obtained by laboratory personnel from various suppliers, but other individuals may obtain and deliver samples if approved by the Owner.
- D. Coordinate schedule with testing agency and the Owner to allow testing agency representative to be on site prior to foundation formwork and at the start of filling operations.
- E. The Contractor shall bear cost of retesting when initial test results indicate non-compliance with specifications, or when alternate sources are submitted.

#### 2 PRODUCTS

#### 2.01 COMMON BORROW

A. Soil which is free from vegetable matter, roots, stumps, lumps of clay, perishable rubbish or peat, or frozen material, which can be placed and compacted to the required densities. 8-inch maximum stone size. Soil or loam "screenings" are not acceptable, since they are mostly stones and roots; these must be removed from the site.

#### 2.02 GEOTEXTILE EARTH STABILIZATION



Weight	6 oz./sy
Grab Tensile Strength	300 lbs.
Thickness	17 mils
Coef of permeability	0.01 cm/sec.
Tear strength	100 lbs.

A. Polypropylene Permeable, Woven, Reinforcement Fabric with the Following Minimum Properties:

#### B. Mirafi 600X; Terra Tex-HD, or approved equal.

#### 2.03 CRUSHED STONE

A. Screened or crushed natural stone, free from shale, organic matter and debris conforming to the following gradation: (ASTM C-33 Size No.56)

SIEVE SIZE	PERCENT PASSING
2-1/2"	100%
2"	95 -100
1"	0 - 30
3/4"	0 - 5

#### 2.04 FLOWABLE FILL

A. Flowable fill shall consist of a low strength mix of cement, fly ash, fine aggregate, water and an admixture (Darafill, or approved equal). The mix design shall consist of 75 pounds of cement, 2,500 pounds of fine aggregate and 2-1/4 ounces of admixture per cubic yard of fill. Mix design to provide 75 psi at 28 days compressive strength.

#### 3 EXECUTION

#### 3.01 CLEARING AND SITE PREPARATION

- A. Prepare the site according to the drawings and specification 311110.
- 3.02 ROUGH GRADING
  - A. Rough grade the area within the limits of work to conform to grades indicated, making provision for finish materials, including necessary cutting and filling. Provide additional Common Borrow material from off-site sources, as necessary to complete the rough grading. See 1.02.B, above.
- 3.03 DISPOSAL
  - A. Dispose of unsuitable material, organic material, wood waste, rock material, and surplus excavated soil in excess of that required for rough grading off the site in a disposal area obtained by the Contractor.



Conform to Federal, State and local solid waste disposal regulations. Spread suitable surplus excavated soil on site in areas directed by the Owner.

- B. Do not remove soil material from the project site until approved by the Owner.
- C. If hazardous waste or special waste as defined by the U. S. Environmental Protection Agency or State Department of Environmental Protection is encountered during excavation, the Contractor shall avoid disturbance of that material, and shall notify the Owner immediately. The State Bureau of Oil and Hazardous Waste Control must be notified and consulted prior to disturbance of the waste or contaminated soil. Removal and disposal of contaminated materials is not included in the Contract Bid, since it must be handled as directed by the regulatory agencies on a case-by-case basis.

#### 3.04 EXCAVATION

- A. Excavation shall be made to the proper depths required by design, including the proper allowance for forms, utilities, etc. Excavation shall be approximately level, clean and clear of loose material. Debris, rock material, organic material or unsuitable material encountered in the excavation shall be removed and disposed of as specified above. Excavation beyond the design limits, made without authorization from the Owner or Geotechnical Engineer, will be refilled with common borrow material compacted to 95% maximum dry density at the Contractor's expense.
- B. Draining of Excavation: The Contractor shall, by use of pumps, wells, well-points, or other approved means as may be necessary, prevent the accumulation of water in the excavated areas. Surface runoff and infiltration of groundwater must be controlled so that excavation, filling, foundation construction, and backfilling will be completed in-the-dry. Water from construction dewatering operations shall be cleaned of sediment before reaching wetlands, water bodies, streams, or site boundaries. Conform to the requirements of the Department of Environmental Protection, and specification Section 312514.
- C. Prior to excavation, obtain confirmation from the Owner and Utility Company that all buried pipes and utilities are located accurately on the Drawings and in the field. Completeness or accuracy of subsurface information is not guaranteed. Obtain the services of 'Dig-Safe' or other qualified detection firm. Provide test pits as necessary to verify location and depth of buried pipes and utilities.
- 3.05 BLASTING
  - A. Do no blasting on site without written Owner approval.

#### 3.06 FILLING AND COMPACTION

- A. General:
  - 1. Fill shall be compacted in 6" to 12" layers to avoid settlement. In filling against walls or pipelines, the fill shall be placed and compacted on both sides at the same time to avoid undue strain.
  - 2. Provide additional material necessary to complete the filling. See 1.01.B, above.
  - 3. Excavate, grade, and re-compact areas of settlement or improper backfill and compaction, at no additional cost to the Owner.



1 GENERAL

#### 1.01 SECTION INCLUDES

- A. Provide temporary erosion control for entire duration of project.
- B. Provide permanent erosion control measures.

#### 1.02 SCHEDULING

- A. Provide to Owner, in writing, a time schedule outlining the sequence of construction for site work.
- B. Plan the sequence of construction so that the smallest practical area of land is exposed at any one time during construction. Schedule the work such that sedimentation barriers nds are installed early in the construction sequence, to prevent sediments from uphill areas reaching streams, wetlands, or property lines.

#### 1.03 SITE CONDITIONS

A. Take necessary steps to prevent soil erosion. Refer to publications of the Maine DEP and the Maine Soil and Water Conservation Commission for additional prevention measures to stop soil erosion and follow DEP "Best Management Practices." The Contractor shall conduct his operations in conformity with all Federal and State permit requirements concerning water, air, or noise pollution, or the disposal of contaminated or hazardous materials. Erosion control measures shown on the Plans are minimum only and are not intended to be complete. Satisfy the current requirements of the regulatory agencies.

#### 2 PRODUCTS

#### 2.01 MATERIALS

- A. Erosion Control Mesh: Intended as a temporary erosion control measure that will decompose after stabilization. Open weave, single jute yarn of loosely twisted construction, not varying in thickness by more than 1/2 its normal diameter. The woven material shall weigh 0.9 pounds per square yard. Synthetic mesh material may be used as approved by the Owner.
- B. Erosion Control Blanket: Intended as a permanent erosion control measure that will reinforce the topsoil and vegetation against erosion after construction. Synthetic fiber matrix sandwiched between heavy duty UV stabilized netting. Blanket shall weigh not less than 0.9 pounds per square yard. North American Green P300 or approved equal.
- C. Staples: No. 11 (or heavier) plain iron wire, made 6 inches in length.
- D. Mulch: Cured straw free from primary noxious weed seeds and rough or woody materials.



#### E. Erosion Control Seed:

<u>TYPE</u>	<u>% BY</u> <u>WEIGHT</u>	<u>%</u> PURITY	<u>% GERMINATION</u>
Domestic Rye Grass	70	69.75	90
Perennial Rye Grass	30	28.00	85

#### F. Silt Fence:

- 1. Support Fence: 30 inch high livestock fence, or high strength plastic mesh.
- 2. Post: Rolled steel manufactured line post or 2 inch diameter hardwood post, 4.5 feet in length.
- 3. Fabric: Pervious sheet of synthetic polymer meeting the following minimum requirements.

Weight	2.5 oz/sy
Width	36 inch
Thickness	12 mils
Equiv. Opening Size	20-50 sieve
Tear Strength	50 lb.
Ultraviolet stability 80%	

- a. Mirafi 100X; Terra Tex-SC, or approved equal.
- 4. Pre-Manufactured Silt Fencing Systems: Separate support fence may be eliminated if fabric is manufactured with reinforcement, including top cord.
  - a. Amoco Propex; AEF Silt Fence-III; or approved equal.
- G. Erosion Control Soil/Bark Mix: Shall consist of a mix of recycled composted shredded bark, stump grindings, flume grit, and fragmented wood generated from water-flume log handling systems. The mix shall conform to the following:
  - 1. pH 5.0 to 6.0.
  - 2. Screen size 6 inch minus.
  - 3. No less than 25 percent organic material.
  - 4. No stones larger than 2 inches in diameter.
- H. Filter Berm: A windrow of erosion control soil/bark mix 2 ft. high by 3 ft. wide. A filter berm may be an acceptable alternative to a silt fence if so noted on the Site Grading and Erosion Control Plan.
- I. Hay Bales: Bales shall be at least 14" x 18" x 30" in size, staked twice per bale. Stakes shall be 1" x 1" x 36" wooden. Place bales with twine on sides of bale, not top and bottom.
- J. Water, calcium chloride, or crushed stone for prevention of airborne dust.
- K. Under-Grate Sediment Trap: A filter fabric bag which hangs under the grate to catch sediments. Provide "Streamguard model 3003", "Basin Bag" by Emco Distribution, "SiltSack High Flow" by ACF Environmental, or approved equal. Install the bag device per manufacturer's recommendation.

#### 3 EXECUTION

#### 3.01 EROSION CONTROL BARRIER

- A. Before earthwork is started, a silt fence, filter berm, or stone sediment dam shall be installed along the down-slope side of the construction site, as necessary, to prevent soil sediment migration away from the site. Install silt fence or filter berm along the down-slope side of all top-soil and subsoil stockpiles.
- B. Erosion control barriers shall be removed after construction is complete, but not until finish grading, final



seeding, and mulching has been completed and the established grass has stabilized the soil. Maintain barrier in good condition until removed.

- C. Remove silt deposits from the site, place in an area of low erosion potential, seed with erosion control mix, and mulch.
- D. Silt Fence: Set fence post 8 feet O.C. to a depth of 2 feet. Attach support fence to post with fencing staples or appropriate wire ties. Overlap joints in support fence 12 inches. Apply fabric to full height of support fence and secure to prevent sagging, blow off, and loss. A 12-inch overlap of fabric for vertical piecing shall be maintained, folded to a 3 inch width and securely attached to supports. No horizontal joints will be allowed. The bottom of the fabric shall be trenched into the existing ground a minimum of 6 inches. In addition, hay bales or ditch checks shall be installed along the silt fence to create sedimentation pools in low areas where run-off concentrates.
- E. Filter Berm: Place uncompacted erosion control mix in a windrow at locations shown on the plan or as directed by the Owner. At a minimum the berm shall be 3 feet wide at the base and 2 feet high at the center of all points along its length. Berm material, where the berm is still required, which has decomposed, clogged with sediment, eroded, or becomes ineffective, shall be replaced. The berm shall be removed from the site when no longer required, as approved by the Owner.

#### 3.02 TEMPORARY SEEDING AND MULCHING

- A. Topsoil stripped and stockpiled on site shall be immediately seeded with erosion control seed mix and mulched with hay.
- B. Exposed earthwork areas, which will not be worked on for one week, shall be mulched with straw. Unfinished areas which are not to be worked on for one month, or will be wintered, shall be seeded with erosion control mix at a rate of 3 pounds of seed per 1000 sq. ft. and mulched with straw. Apply straw mulch at the rate of 75 pounds per 1000 sq.ft. Anchor mulch to prevent wind blown movement.
- C. In sensitive areas (steep slopes steeper than 3:1) temporary mulch must be applied at the end of each work day and prior to any storm event.
- D. No fill shall be placed on hay mulch. Dispose of used hay mulch off site.

#### 3.03 FALL AND WINTER STABILIZATION(September 15 or Later)

- A. The site is anticipated to be constructed, stabilized, and obtained a full catch of grass before fall and winter conditions. In the event winter conditions are encountered, stabilize exposed soils throughout the project site with permanent seed and mulch by September 15, with the exception of areas undergoing active earthmoving operations. These construction areas are primarily in the immediate vicinity of the building. For proposed grass areas not stabilized by permanent seed and mulch by this date, provide the following stabilization measures at no additional cost to the Owner. Select the appropriate methods from the options listed and obtain approval from the Owner prior to installation.
  - 1. Stabilize the soil with temporary vegetation, except for ditches, by October 1. Place winter rye seed at the rate of 3 pounds per 1000 sq.ft. and lightly mulch with hay or straw at 75 pounds per 1000 sq.ft. Place erosion control mesh over mulch and anchor.
  - 2. For slopes flatter than 3H:1V, place sod over the exposed soil by October 1. Roll the sod, anchor it with wire pins, and water it to promote growth.
  - 3. For grassed areas flatter than 10H:1V, stabilize the disturbed soil by November 1with temporary winter mulching by applying hay or straw at a rate of at least 150 pounds per 1000 sq.ft., such that no soil is visible through the mulch. Anchor mulch with erosion control mesh.
  - 4. For slopes steeper than 10H:1V and flatter than 2H:1V, place a 6" layer of erosion control soil/bark mix on the disturbed soil by November 1. Remove snow accumulated on the slope prior



to installation. If groundwater seeps are present, place stone rip rap to thickness shown on drawing details over non-woven geotextile.

- 5. For drainage ditches or channels, place a sod lining by October 1 or place a rip rap lining by November 1. Sod shall be rolled, fastened with wire pins, anchored with erosion control mesh, and watered. Rip rap shall be placed at the thickness shown on the drawing details over a layer of non-woven geotextile.
- B. If the catch of permanent or temporary grass is less than 3" tall or covers less than 75% of the disturbed soil by November 1, apply additional hay mulch at a rate of 150 pounds per 1000 sq.ft. Anchor mulch with erosion control mesh.

#### 3.04 DRAINAGE DITCHES AND EMBANKMENTS

- 1. Drainage ditches shall be provided with a temporary stone check dams spaced such that the bottom of the upstream check dam is at the same elevation as the top of the next downstream checkdam.
  - a. Temporary ditch check dams shall be constructed where indicated, using stones in the configurations shown on the detail sheet. Additional temporary ditch dams shall be installed from time to time during the construction where necessary to prevent soil particle migration from the work area. Where necessary due to terrain configuration, earth berms shall be constructed at one or both ends of the ditch check so as to contain runoff. The tops of earth berms shall be higher than the tops of the dams so that runoff will occur only over the dams. Sand bags may be used instead of earth berms at the Contractor's option but shall be faced with earth placed against the upstream face.
- B. Grassed drainage ditches and swales shall be lined with a continuous matt of erosion control mesh for full bottom width and side slopes to 12" above bottom, within 48 hours of final grading and prior to a storm event, in order to stabilize the loam, seed, and mulch.
- C. Where erosive velocities in ditches or embankments are anticipated or experienced, and soil cannot be stabilized with mulch and mesh alone, substitute erosion control soil/bark mix in place of loam. For this use, screen the erosion control soil/bark mix to remove wood, bark, and stones one-inch in size and greater. If erosion control soil/bark mix is used in ditches, and erosive velocities are excessive, provide a 12" thick stone rip rap lining along ditch bottom and up side slopes to one foot above the bottom elevation. Place non-woven geotextile beneath stone.
- D. Install erosion control mesh over mulch on slopes steeper than 6 horizontal to one vertical (16%) and in conformance to DOT Standard Specifications, latest Edition, Section 613, paragraphs 613.03 through 613.06. Anchor mesh as recommended by manufacturer.
- E. Permanently rip-rap inlets and outlets of culverts and pipe outfalls within 48 hours of installation, as shown on the Drawings.

#### 3.05 PARKING AND DRIVES

- A. When the paved areas on site become covered in soils tracked from the construction area, sweep the pavement to maintain a clean site and avoid tracking soils off-site.
- B. When construction is substantially completed, sweep the paved areas of tracked soils.



#### 3.06 DUST CONTROL

- A. Use traffic control to restrict traffic to predetermined routes. Maintain as much natural vegetation as is practicable. Use phasing of construction to reduce the area of land disturbed at any one time. The use of temporary mulching, permanent mulching, temporary vegetative cover, permanent vegetative cover, or sodding will reduce the need for dust control. Use mechanical sweepers on paved surfaces where necessary to prevent dust buildup. Stationary sources of dust, i.e., rock crushers, shall utilize fine water sprays to control dust.
- B. The exposed soil surface shall be moistened periodically with adequate water to control dust.
- C. Calcium chloride shall be either loose dry granules or flakes fine enough to feed through a spreader at a rate that will keep surface moist but not cause pollution or plant damage. Liquid calcium chloride can also be used. To reduce potential for environmental degradation, use only when other methods are not practical.
- D. Cover surface with crushed stone or coarse gravel. In areas adjacent to waterways, use chemically stable aggregate.
- E. When temporary dust control measures are used, repetitive treatment shall be applied as needed to accomplish control.

#### 3.07 CONSTRUCTION DE-WATERING

A. Water from construction dewatering operations shall be cleaned of sediment before reaching wetlands, water bodies, streams, or site boundaries. Utilize temporary sediment basins, erosion control soil filter berms backed by staked hay bales, "Dirt Bag 55" sediment filter bag by ACF Environmental Inc, or other approved Best Management Practices (BMP's).

#### 3.08 ADDITIONAL MEASURES

- A. Areas outside the Contract work limits shall be protected from lubricants, fuel, sediment and other pollutants.
- B. Inspect erosion and sedimentation control weekly and after every storm and maintain in good working condition for project duration.

#### 3.09 REMOVAL AND DISPOSAL

- A. When permanent soil stabilization has been achieved, temporary materials and devices that are not readily degradable shall be removed and disposed of off site. Silt fences, filter berms, and catch basin sediment filters must be fully removed. Re-usable materials are and shall remain the property of the Contractor.
- B. Remove silt and sediment from catchbasins, drainage ways, silt ponds and other silted areas and dispose off site. Place the silt in an area of low erosion potential, and seed and mulch it for stability.



#### **SECTION 313713**

#### 1 GENERAL

#### 1.01 SECTION INCLUDES

- A. Provide labor and materials to complete the earthwork within the limit of work as shown on the Drawings and/or herein specified.
  - 1. Pumping of excavation as may be required.
  - 2. Geotextile
  - 3. Rip rap.

#### 1.02 SUBMITTALS

A. Submit manufacturer's product literature and test results for approval on all materials. Make submissions in accordance with Division 1 Submittals section.

#### 1.03 PROTECTION

- A. Prior to excavation, verify the underground utilities, pipes, structures, and facilities. See Specification 312316.
- B. Shoring: Do shoring, bracing, etc., necessary to support soil adjoining the excavation and to protect foundation of existing building, in compliance with OSHA and all other Federal, State, and local codes.
- C. Protect newly filled areas from traffic and erosion. Repair and re-establish grades to the specified tolerances in settled, eroded and rutted areas. Where completed compacted areas are disturbed by subsequent construction operations or adverse weather, scarify the surface, re-shape and compact to the required density prior to further construction.
- D. Protect structures, utilities, sidewalks, culverts, pavements, and other facilities from damage caused by settlement, lateral movement, undermining, washout and other hazards created by earthwork operations. Repair, or have repaired, all damage to existing utilities, structures, culverts, pavement, lawns, other public and private property which results from construction operations, at no additional expense to the Owner, to the complete satisfaction of the utility, the property owner, and the Owner.

#### 2 PRODUCTS

#### 2.01 STONES FOR RIP-RAP

- A. Size the stone mixture such that 50% of the stones, by weight, are larger than the specified d50 size. Stones shall not be schistosic.
- B. Rip-Rap: 4" to 12" diameter, hard, sound angular stones, d50 = 6".



#### 2.02 NON WOVEN DRAINAGE FABRIC

Weight	5- oz./sy
Grab Tensile Strength	120 lbs.
Flow Rate	110 - 135 gal/sec/sf
Tear strength	50 - 60 lbs.

A. Mirafi 140N/160N or approved equal.

2.03

#### 3 EXECUTION

#### 3.01 RIP-RAP

- A. Non-woven geotextile fabric shall be installed on top of shaped subgrade with fabric contacting the soil (no bridging), and overlapping 12 inches when a seam is necessary. Seams shall not be allowed in the flow path of channels where concentrated run-off is intended.
- B. The stones shall be placed on the geotextile with their beds at right angles to the slope, the larger stones being used in bottom courses. They shall be laid in close contact so as to break joints, and in such manner that the weight of the stone is carried by the earth and not the adjacent stones.
- C. The spaces between the larger stones shall be filled with spalls securely rammed into place. The finished work shall present an even, tight and reasonably smooth surface conforming to the required contour, and have a neat orderly appearance without scattered stones.



#### 323113

#### FENCES

#### 1 GENERAL

#### 1.01 SECTION INCLUDES

- A. Provide Labor, Materials, and Equipment for Site Improvements Shown on the Drawings or Specified Herein, Including:
  - 1. Chain-link fence

#### 1.02 SUBMITTALS

- A. Submit manufacturer's product literature and Shop Drawings for approval on materials in accordance with Division 1 Submittals section.
- 1.03 DELIVERY, STORAGE AND PROTECTION
  - A. Deliver materials to the site in an undamaged condition. Carefully store materials off the ground to provide proper protection against oxidation, and other damage caused by ground contact.

#### 2 PRODUCTS

#### 2.01 CHAIN-LINK FENCE

- A. Chain-Link Fencing Fabric: galvanized steel, 9-gage core wire size with a zinc coating of at least 2 oz. per square foot. Mesh size shall be two inch. Selvage shall be knuckled at bottom and top. Fence height shall be as shown on the Drawings.
- B. Posts, Top Rails, Bottom Rails and Braces: Material shall be zinc-coated, Schedule 40, round steel pipe; weight of zinc coating shall be 1.6 ounces per square foot of base metal surface. Provide galvanized post tops shaped to receive top rail. Provide fabric ties of 9 gauge aluminized wire. Provide bottom rails on all sizes of fence. Provide all components with the following dimensions.

USE AND SECTION	OUTSIDE DIAMETER NOMINAL INCHES				
End, corner and pull posts (tubular) fabric height 6'-0" and less	2.375				
Over 6'-0"	2.875				
Rails and post braces	1.66				
INTERMEDIATE POSTS FOR FABRIC HEIGHTS					
6'-0" and less	1.90				
Over 6'-0"	2.375				

#### EXECUTION



3

#### 3.01 POST INSTALLATION

- A. Install posts for the fence and playfield equipment on previously prepared surfaces to line and grade as indicated. Install in accordance with the manufacturer's written installation instructions except as modified herein.
- B. Excavation: Excavate for concrete-embedded items to dimensions indicated. Clear post holes of loose material. Dispose of waste material as directed.
- C. Post Setting: Set posts plumb. Provide 10" diameter concrete bases for line posts to depths of 5 ft. Drive line posts to depth of 5 ft. Provide drive anchors on line posts. Provide 12" diameter concrete bases for corner posts to depths of 5 ft. Thoroughly compact concrete to be free of voids and finish in a dome. Cure concrete a minimum of 72 hours before any further work is done on posts.

#### 3.02 FENCE CONSTRUCTION

- A. Bracing: Brace gate, corner, end, and pull posts to the nearest post with a horizontal brace used as a compression member and a diagonal truss rod and truss tightener used as a tension member.
- B. Rails: Install rails before installing chain-link fabric. Pass top rail through intermediate post caps. Provide expansion coupling spaced as recommended by the manufacturer.
- C. Fabric: Pull fabric taut and secure fabric to top rail close to both sides of each post and at intervals of not more than 24 inches on centers. Secure fabric to posts using stretcher bars and ties or clips or by integrally weaving to integral fastening loops of end, corner, pull, and gate posts for full length of each post. Install fabric on opposite side of posts from area being secured. Install fence fabric to provide approximately 2-inch deflection at center of span of fabric between two posts, when a force of approximately 30 pounds is applied perpendicular to fabric. Fabric should return to its original position when force is removed.



#### 329113

### LAWNS AND GRASSES

#### LAWNS AND GRASSES

#### 1 GENERAL

- 1.01 SECTION INCLUDES
  - A. Provide labor, materials and equipment required to complete loaming, fine grading, liming, fertilizing, seeding.
- 1.02 QUALITY ASSURANCE
  - A. Qualifications of Workmen: Provide at least one person who shall be present during execution of this portion of the Work, be thoroughly familiar with the type of materials being installed and the best methods for their installation, and direct work performed under this Section.
  - B. Standards:
    - 1. Planting material shall meet or exceed the specifications of Federal and State laws requiring inspection for plant disease and insect control.
    - 2. Quality shall conform with the current edition of "Horticultural Standards" for number one grade nursery stock, as adopted by the American Association of Nurserymen.

#### 1.03 SUBMITTALS

- A. Materials List: Before materials are delivered to the job site, submit to Owner a complete list of seeding, mulching, soil amendments, and other items proposed to be installed.
  - 1. Include complete data on source, size and quality.
  - 2. Demonstrate complete conformance with the requirements of this Section.
  - 3. This shall in no way be construed as permitting substitution for specific items described in the Drawings or these Specifications unless the substitution has been approved in advance by the Owner.
- B. Submit copies of all soil test reports; including initial and final testing.
- C. Certificates:
  - 1. Certificates required by law shall accompany shipments.
  - 2. Prior to installation, deliver certificates to Owner.

#### 1.04 PRODUCT HANDLING

- A. Delivery and Storage:
  - 1. Deliver items to the site in their original containers with labels intact and legible at time of Owner's inspection.
  - 2. Immediately remove from the site seeding materials which are not true to name and materials which do not comply with the provisions of this Section of these Specifications.
  - 3. Protect seeding materials before, during and after installation and to protect the installed work and materials of other trades.
- B. Replacements: In the event of damage or rejection, immediately make repairs and replacements necessary to the approval of the Owner, at no additional cost to the Owner.



#### 1.05 PLANTING TIME

- A. Seeding: Seeding shall be done between August 15th to September 15th and/or April 15th to June 15th.
- B. Variance: If special conditions exist which may warrant a variance in the above planting dates, a written request shall be submitted to the Owner stating the special conditions for the proposed variance. Permission for the variance will be given if warranted in the opinion of the Owner. Regardless of the time of seeding, the Contractor shall be responsible for a full growth of grass.
- C. Place permanent soil stabilization within 15 days of final grading.

#### 2 PRODUCTS

#### 2.01 TOPSOIL

- A. General: the project's purpose is a playfield to be used by students and the community. Grass growth on the supplied topsoil is of prime importance.
- B. Topsoil, except that existing on the site, will not be made available by the Owner. The Contractor shall be responsible for supplying any additional topsoil needed and hauling it to the site. It shall be obtained from naturally well-drained areas. Whether from on-site or off-site source, the topsoil shall be a fertile, friable natural loam containing no less than 7% nor more than 15% organic matter, by weight. The pH of the soil shall be between 6 and 7 and shall not contain soluble salts greater than 500 parts per million. It shall not contain toxic substances which may be harmful to plant growth. Topsoil shall be without admixture of subsoil and shall be cleaned and free from clay lumps, stones, stumps, roots, or similar substances 3/4-inch or more in diameter, debris, or other objects which might be a hindrance to planting operations. Soil shall not be used for planting while in frozen or muddy condition. Furnish all topsoil required to complete the work. Materials removed shall be disposed of by the Contractor.
- C. Maximum particle size of 3/4-inch, with maximum of 3% retained on the 1/4-inch mesh sieve. Composition in the following range:

i in the follow	ing range.
Silt	15 to 40%
Sand	30 to 70%
Clay	3 to 15%

- D. Initial Testing: Take representative samples of topsoil from the site and from borrow sources and submit samples to a Soil Testing Laboratory for chemical and physical analysis. Each sample shall be made by combining 10 small grab samples from throughout the source. Indicate to the testing agencies that turf is to be planted and the name of the Owner. Forward to the Owner two copies of analysis and recommendations of the testing agencies.
- E. Final Testing: After the final topsoil has been amended and mixed as recommended, take representative samples and submit them to a Soil Testing Laboratory for chemical and physical analysis. Each sample shall be made by combining 10 small grab samples from throughout the source. Make final amendments to the topsoil to meet the specification, based on the test results. Forward to the Owner two copies of analysis and recommendations of the testing agencies.

#### 2.02 FERTILIZER

A. Starter Fertilizer: shall be a commercial balanced fertilizer (18-24-12), delivered to the site in bags labeled with manufacturer's guaranteed analysis. Approximately 30% to 50% of the fertilizer shall be a slow release form (UF IDBU SCU).



- B. Fertilizer shall be mixed, as specified, and delivered to the site in standard, unopened containers showing weight, guaranteed analysis, and name of manufacturer.
- C. Special Protection: If stored at the site, protect fertilizer from the elements.

2.03 SOIL AMENDMENTS

- A. Peat: Peat shall be moist. It shall be finely shredded, consist of 90 percent organic moss peat, be brown in color, and suitable for horticultural purposes. Shredded particles shall not exceed one (1) inch in diameter. Peat shall be measured in air dry condition, containing not more than 35 percent moisture by weight. Ash content shall not exceed 10 percent.
- B. Compost: Compost shall meet Maine Department of Environmental Protection rules and guidelines and must be approved for commercial landscaping. Vendor shall provide approximate nitrogen availability calculations for soil blending and complete set of available plant nutrients, pH, trace metals, total volatile solids, soluble salts, measured water holding capacity and maturity measurements. Compost shall be weed seed free and consist of approximately equal portions of municipal bio-solids, short paper fiber, wood ash and sawdust and be the product of 15 days of thermophillic aerobic decomposition followed by 90 days of curing. Compost will be adequately stabilized, pathogen free with acceptable odor. The material shall pass through a 3/8" mesh screen, be friable and free of stones, sticks and all objectionable debris. Compost source is subject to the review of the Engineer.

**Compost Parameters:** 

C:N Ratio	20:1 - 35:1
Total Nitrogen	<1.5%
Maturity Index	Stable - Very Stable
Texture	100% passing 3/8" screen
Soluble Salts <4 m	mhos/cm
Moisture Content	40-60%
Total Volatile Solids	<60%
Density	800 - 1200 lbs./cy

Earth Life Products Compost from New England Organics, Falmouth, Maine, or approved equal.

C. Limestone: Ground dolomitic limestone shall be an approved agricultural limestone and shall contain not less than 85 percent of total carbonates with a minimum of 30% magnesium carbonates. Limestone shall be ground to such fineness that 50 percent will pass a 100 mesh sieve, and 90 percent will pass a 20 mesh sieve.

#### 2.04 GRASS SEED

- A. General: Grass seed shall be:
  - Free from noxious weed seeds and recleaned. 1.
  - 2. Grade A recent crop seed.



- 3. Treated with appropriate fungicide at time of mixing.
- 4. Delivered to the site in sealed containers with dealer's guaranteed analysis.
- 5. Each variety of seed shall have percentages of germination of not less than 80%, and a percentage of purity of not less than 85%.

#### B. Seed Mix Proportions by Weight:

Description	Kind of Grass	Proportion by Weight
General Lawn Areas	Chewing Fescue "Dignity"	35%
	Pennlawn Creeping Red Fescue	35%
	Perennial Rye "Tourstar" (Nutrite)	30%

C. Weed seed content shall not exceed 0.25 percent. Wet, moldy, or otherwise damaged seed will be rejected.

#### 2.05 MULCH

A. Mulch shall consist of long fibered hay or straw, reasonably free from noxious weeds or other undesirable material. No material shall be used which is so wet, decayed, or compacted as to inhibit even and uniform spreading. No chopped hay, grass clippings or other short fibered material shall be used unless directed.

#### 3 EXECUTION

#### 3.01 SURFACE CONDITIONS

- A. Inspection:
  - 1. Prior to work of this Section, carefully inspect the installed work of other trades, and verify that such work is complete to the point where this installation may properly commence.
  - 2. Verify that seeding may be completed in accordance with the original design and the referenced standards.

#### 3.02 SUBGRADE PREPARATION

- A. The Contractor shall do whatever grading is necessary to bring the subgrade to a true, smooth slope, parallel and at the depth shown on the Drawings below finished grade, for seed bed areas.
- B. There must be sufficient grade staked to insure correct line and grade of subgrade and of finished grade.
- C. Immediately prior to being covered with topsoil, the top 3" to 6" of the subgrade shall be raked or otherwise loosened and shall be free of stones, rock and other foreign material 1-1/2" or greater in dimensions.

#### 3.03 FINISH GRADE PREPARATION

- A. Topsoil shall not be delivered or worked in a frozen or muddy condition.
- B. Place and spread topsoil over approved areas to a depth sufficiently greater than shown on the Drawings in "loam and seed" lawn areas and in plant bed areas so that after natural settlement and light rolling, the completed work will conform to the lines, grades, and elevations indicated.



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#### AUBURN SCHOOL DEPARTMENT

- C. After topsoil has been spread in approved areas, it shall be carefully prepared by scarifying or harrowing, and stones over one inch in diameter shall be removed from the topsoil. It shall be free of smaller stones in excessive quantities, as determined by the Owner.
- D. The whole surface shall then be rolled with a roller which weighs not more than 100 pounds per foot of width. During the rolling, all depressions caused by settlement of rolling shall be filled with additional topsoil, and the surface shall be regraded and rolled until presenting a smooth and even finish to the required grade.
- E. The playfield surface shall have a thicker, 8 inch layer of topsoil.

#### 3.04 SEED BED PREPARATION

- A. After the areas to be seeded have been brought to the grades specified, spread limestone at a rate of 100 pounds minimum per 1,000 square feet, or as recommended by soil testing agencies.
- B. Apply starter fertilizer at a rate of 15# per 1000 sq. ft. just prior to final grading of the site. Thoroughly and evenly incorporate fertilizer and lime with the soil to a depth of 3" by discing or other approved method. In areas inaccessible to power equipment, use hand tools. Adjacent to trees and shrubs use hand tools to avoid disturbance of the roots. Provide a second application of starter fertilizer at a rate of 6# per 1000 sq.ft. approximately 2 weeks after seedling emergence.
- C. Reconstitute the soil, as may be recommended by a soil testing agency, prior to use as planting soil. Any deficiencies in the topsoil shall be corrected by the Contractor, as recommended, at no expense to the Owner.
- D. After incorporation of fertilizer and lime into the soil, the seed bed shall be fine graded to remove all ridges and depressions and the surface cleared of all debris and of all stones one inch or more in diameter.

#### 3.05 SEEDING

- A. Immediately before seeding, the ground shall be restored, as necessary, to a loose friable condition by discing or other approved method to a depth of not less than 2". The surface shall be cleared of all debris and of all stones 1" or more in diameter.
- B. Seed with specified grass seed, sowing evenly with a Brillion seeder or other approved mechanical seeder at the rate of 5 pounds per 1,000 square feet. Sow 50% in one direction and 50% at right angles to the first seeding. Spread seed when soil is moist. Cultipacker, or approved similar equipment, may be used to cover the seed and to firm the seed bed in one operation. In areas inaccessible to cultipacker, the seeded ground shall be lightly raked and rolled in two directions with a water ballast roller. Extreme care shall be taken during seeding and raking to insure that no change shall occur in the finished grades and that the seed is not raked from one spot to another.
- C. Hydro-seeding may be used for playfield slopes. Certify in writing that the hydro-seed fertilizer mix is as herein specified and applied at the equivalent rate.
- D. Promptly after seeding, wet the seed bed thoroughly, keeping all areas moist throughout the germination period.
- E. Mulch shall be placed immediately after seeding. Hay that has been thoroughly fluffed shall be spread evenly and uniformly at the rate of two to three tons per acre. Lumps and thick mulch materials shall be thinned. Anchor hay mulch with erosion control mesh on slopes steeper than 6 horizontal to one vertical



(16%) and as necessary to prevent movement. Anchor mesh as recommended by manufacturer. Hydromulching is an acceptable method of mulching. The mulch shall consist of natural cellulose wood fibre containing no materials which will inhibit seed germination or plant growth. Sufficient non-toxic water soluble green dye shall be added to provide a definite color contrast to the ground surface to aid in even distribution. Wood fibre mulch shall be supplied in uniform packages not exceeding 100 pounds each. Each package shall be marked to show the air dry weight.

F. Take whatever measures are necessary to protect the seeded area while it is germinating. These measures shall include furnishing warnings signs, barriers, and other needed measures of protection, and as noted on the drawing.

#### 3.06 MAINTENANCE

- A. Maintenance shall begin immediately after seeding operations and shall continue until Project Substantial Completion or for a minimum of 60 days, whichever is longer.
- B. Maintenance of seed areas shall consist of watering, weeding, curing, repair of all erosion, and reseeding as necessary to establish a uniform stand of grass. Lawns shall be watered in a satisfactory manner during and immediately after planting, and not less than twice per week until Project Substantial Completion. Areas which fail to show a uniform stand of grass for any reason shall be reseeded repeatedly until a uniform stand is attained. Scattered bare spots approximately 8" in size, evenly distributed in any lawn area, will be allowed at the discretion of the Owner.
- C. At the time of the first cutting, there shall be a uniform stand between 3 and 3-1/2" high, and mower blades shall be set between 2-1/2" and 3" high. Provide at least 3 cuttings of grass in lawn areas not closer than 10 days apart. Catch shall be representative of seed specified.
- D. Correct graded areas which settle during the first 12 months after Project Substantial Completion

#### 3.07 CLEAN-UP

- A. When this work is done while buildings are occupied, pavements shall be kept broom cleaned to prevent tracking dirt into buildings.
- B. After completion of planting operations, dispose of debris and excess material to the satisfaction of the Owner. Pavements shall be broomed and hosed clean.

### 3.08 FINAL INSPECTION AND ACCEPTANCE

- A. At the end of the guarantee period, the Owner will inspect guaranteed work for the Final Acceptance upon written request of the Contractor. The request shall be received at least 10 calendar days before the anticipated date for final inspection.
- B. Upon completion and reinspection of repairs or renewals necessary in the judgement of the Owner at that time, he shall certify in writing to the Contractor as to the Final Acceptance of the project.



#### 334113

#### STORM DRAINAGE

1 GENERAL

#### 1.01 SECTION INCLUDES

- A. Provide labor and materials to complete storm drainage as shown on the Drawings and/or herein specified.
  - 1. Catch basin and stormdrain outlet
  - 2. Trench insulation.

#### 1.02 RELATED SECTIONS IN OTHER DIVISIONS

A. Section 03300: Cast-In-Place Concrete.

#### 1.03 SUBMITTALS

- A. Submit manufacturer's product literature and Shop Drawings for approval on materials in accordance with Division 1 Submittals section.
- B. Certified copies of test results.
- C. As-built records of pipe location, depth, services, and repairs.

#### 2 PRODUCTS

#### 2.01 STORM DRAINS

- A. Unless Otherwise Noted Use the Following Pipe Materials:
  - 1. High density polyethylene pipe (HDPE), conforming to ASTM D3350 and AASHTO M294 with corrugated exterior and smooth interior. Couplings and fittings of same material conform to AASHTO M294.

#### 2.02 CATCHBASINS

- A. Precast reinforced concrete 4000 psi base and barrel sections of dimensions shown on the Drawings, haunched concentric cone sections conforming to ASTM C478, constructed to support HS-20 wheel loading.
- B. Joints sealed watertight with flexible strips of butyl rubber joint sealant. Pipe openings precast into units, using cast-in EPDM flexible sleeves meeting ASTM C-923 with stainless steel coupling bands.
- C. Provide a 24-inch deep sump in catchbasins, unless otherwise noted.

#### 2.03 CATCHBASIN FRAMES AND GRATES

A. Cast iron conforming to ASTM A48, heavy-duty of 450 pounds minimum weight to support H-20 wheel loading, with machined bearing surfaces. Square frame and grate of 24-inch dimensions with bicycle-safe grate grid of 225 square inch minimum flow area.

#### 3 EXECUTION

3.01 EXCAVATION AND BACKFILL MAIN-LAND DEVELOPMENT CONSULTANTS, INC www.main-landdci.com

A. Conforming to the appropriate portions of Section 322316, Earthwork.

#### 3.02 STORM PIPING

- A. Lay pipe on stable bedding beginning at the downstream end and proceeding upstream with the bell end of the pipe upstream. Provide adequate trench drainage to prevent pipe floatation and insure proper bedding compaction.
- B. Where continuous bedding material is used and pipe slope exceeds 3%, construct trench dams along the trench to hinder the flow of ground water through the bedding material. Construct trench dams of relatively impervious clayey or silty material excavated from the trench, extending 1 foot above the pipe embedment zone, and spaced within 25 feet upstream of each manhole, and whenever the trench grade rises 10 feet.
- C. Provide 4 foot wide layer of 2-inch thick rigid foam insulation on bedding material 2-inches above top of pipe, where depth of cover over the top of pipe is less than 5 feet.
- D. Provide 4 foot wide layer of 2-inch thick rigid foam insulation on bedding material 6-inches above or below sewer pipe, where it crosses a storm drain pipe with less than 5 feet of separation.
- E. Coordinate work on municipal utility lines with Auburn Water & Sewerage District and Department of Public Works.

#### 3.03 CATCHBASINS AND DRAIN INLETS

- A. Place precast base section level on 8-inch layer of compacted granular bedding material to proper invert elevation. Construct precast sections plumb and with watertight joints and pipe connections. Manhole steps must be in vertical alignment.
- B. Fill lifting holes and voids with cement mortar.
- C. Adjust new manhole frames to proper grade by use of precast concrete riser rings or brick and mortar. Use a minimum of 4" of risers and a maximum of 12". Encase frame in full bed of cement mortar.

#### 3.04 DRAIN OUTLETS

A. Install rip-rap according to section 313713.

#### 3.05 DRAINAGE DITCHES

A. Provide ditch erosion control according to section 322514.



END OF SECTION

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#### SITE IMPROVEMENTS

#### 1 GENERAL

#### 1.01 SECTION INCLUDES

- A. Provide Labor, Materials, and Equipment for Site Improvements Shown on the Drawings or Specified Herein, Including:
  - 1. Utility Pole
  - 2. Conduit trenches

#### 1.01 SUBMITTALS

- A. Submit manufacturer's product literature and Shop Drawings for approval on materials in accordance with Division 1 Submittals section.
- 1.02 DELIVERY, STORAGE AND PROTECTION
  - A. Deliver materials to the site in an undamaged condition. Carefully store materials off the ground to provide proper protection against oxidation, and other damage caused by ground contact.
- 2 PRODUCTS

#### 2.01 BURIED WARNING AND IDENTIFICATION TAPE

- A. For non-metallic pipe use metallic core or metallic-faced, acid and alkali-resistant, polyethylene plastic warning tape manufactured specifically for warning and identification of buried utility lines. For metallic pipe use non-metallic polyethylene plastic warning tape. Provide tape on rolls, 3 inch minimum width, color coded as specified below for the intended utility with warning and identification imprinted in bold black letters continuously over the entire tape length. Warning and identification to read, "CAUTION, BURIED (intended service) LINE BELOW" or similar wording. Color and printing shall be permanent, unaffected by moisture or soil.
- B. Minimum thickness of the tape shall be 0.004 inch. Tape shall have a minimum strength of 1500 psi lengthwise and 1250 psi crosswise. Metallic tape shall be manufactured with integral wires, foil backing, or other means of enabling detection by a metal detector when tape is buried up to 3 feet deep.



WARNING TAPE COLOR CODES			
Red	Electric		
Yellow	Gas, Oil, Dangerous Materials		
Orange	Telephone and other Communications		
Blue	Water Systems		
Green	Sewer Systems		
White Steam Systems			
Gray	Compressed Air		

### 2.02 CONDUITS, CONDUCTORS, AND FIXTURES

- A. Conduits, conductors, fixtures, and other items requiring a licensed electrician is part of the electrical contractor's scope.
- 2.03 UTILITY POLES
  - A. Each utility pole used for lighting will be 40 ft in length and made of pressure treated lumber.

#### 3 EXECUTION

#### 3.01 TRENCH WORK

- A. Perform earthwork according to section 312316.
- B. Electrical Conduits: Unless shown otherwise, bury beneath finish grade a minimum of 29 inches to top of conduit, or as required by the National Electrical Code or local utility company, whichever is deeper. Surround conduits by a minimum of 6 inches of sand or bedding material, compacted to 95% maximum dry density.

#### 3.02 UTILITY POLES

- A. Each utility pole will be located in accordance with C2.1 Site Layout Plan.
- B. Each pole will be buried a minimum of 7 ft vertically into the ground.

#### **SECTION 340000**

#### 1 GENERAL

#### 1.01 DESCRIPTION OF REQUIREMENTS

- A. Regulate traffic in the area of work being performed.
- B. Perform work in a manner to provide safe passage for the public at all times with a minimum of obstruction to traffic.
- C. The local police department, fire department, PUBLIC WORKS DEPARTMENT and the **Maine Department of Transportation** will determine if safe passage is being maintained. Perform additional work as required to maintain passage at no additional cost to Owner.
- D. Provide all signs, barricades, flags, traffic guards, and warning devices required.
- E. Provide access for residents and abutting land owners along the Project to driveways and other normal outlets from their property.

#### 2 PRODUCTS

#### 2.01 SIGNS, BARRICADES, AND WARNING DEVICES

A. Comply with requirements in "Manual on Uniform Traffic Control Devices" published by Department of Transportation, Federal Highway Administration and requirements of Maine Department. of Transportation, current edition.

#### 3 EXECUTION

#### 3.01 MAINTENANCE OF TRAFFIC

- A. Maintain at least one-way traffic through the work area during working hours and two-way traffic during the night, weekends, and holidays.
- 3.02 SIGNS, BARRICADES, AND WARNING DEVICES
  - A. Provide adequate warning signs, barricades, signal lights, and take other necessary precautions for the safety of the public.
  - B. Provide and illuminate suitable warning signs to show where construction, barricades, or detours exist.
  - C. Signal lights: Illuminate at all barricades and obstructions from sunset to sunrise.
  - D. Maintain necessary signs, and signs required by the Maine Department of Transportation, barricades, lights, and other safety precautions during authorized suspension of the work, weekends, holidays, or other times when construction work is not in progress.

#### 3.03 TRAFFIC GUARDS AND FLAGGERS

A. Flaggers: Provide flaggers for traffic control whenever traffic is limited to one way traffic and as required by referenced standards.



B. Uniformed Traffic Guards: Provide uniformed traffic guards when required by local or State police.

#### 3.04 EXISTING SIGNS

- A. Temporarily reset and maintain street directory and regulatory signs which must be moved during construction. Relocate signs so that no traffic hazards are created.
- B. Permanently reset signs at their original designated locations prior to completion of the Work.



#### **ROADWAYS AND TRAFFIC**

1 GENERAL

#### 1.01 SECTION INCLUDES

- A. Provide Labor, Materials, and Equipment for Site Improvements Shown on the Drawings or Specified Herein, Including:
  - 1. Temporary Construction Fence

#### 1 PRODUCTS

- 1.01 TEMPORARY CONSTRUCTION FENCE
  - A. Vinyl construction fence is acceptable
  - B. Utilize temporary steel fence posts.

#### 2 EXECUTION

#### 2.01 TEMPORARY CONSTRUCITON FENCE

- A. Install fencing prior to beginning work.
- B. Install post no more than 10 ft apart.
- C. Inspect fence condition after every storm or wind event.

#### 2.02 TEMPORARY CONSTRUCITON ENTRANCE

- A. Utilize south parking lot gate.
- B. Key to gate will be provided by school Principal.
- C. Close and lock the gate at the end of each work session.
- D. Vehicles and equipment will utilized paved areas for access as much as practical.
- E. Any damaged grass areas will be remediated with hay and seed.





2.	AREA SUMMARY:	
	REMAINING LAND	4.55 ACRES, MORE OR LESS.
	ABUTTER CONVEYANCE	0.30 ACRES, MORE OR LESS.
	TOTAL AREA	4.85 ACRES, MORE OR LESS.

CORDUCT AUBURN AVE	
OCATION MAP $1'' = 1/2$ MILE	PARKING
SURVEY NOTES 1. ALL BEARINGS ARE REFERENCED TO MAINE STATE GRID, WEST ZONE, NAD83 AND BASED ON	
GPS OBSERVATIONS NEAR THE SURVEYED PARCEL. 2. CITY OF AUBURN: TAX MAP 260, LOT 197 & 198.	CONTRACTOR TO BE TEMPORARILY PROVIDED GATE KEY BY OWNER
3. OWNER OF RECORD AT TIME OF SURVEY: CITY OF AUBURN: BOOK 342, PAGE 238, BOOK 165, PAGE 590, BOOK 75, PAGE 595, AND BOOK 4536, PAGE 294.	
1. AREA SUMMARY:         REMAINING LAND       4.55 ACRES, MORE OR LESS.         ADULTED CONVENTION       0.70 ACRES, MORE OR LESS.	
ABUTTER CONVEYANCE0.30 ACRES, MORE OR LESS.TOTAL AREA4.85 ACRES, MORE OR LESS.	
5. ALL BOOK AND PAGES REFER TO THE ANDROSCOGGIN COUNTY REGISTRY OF DEEDS. 5. INTERIOR BUILDINGS AND PAVEMENT SHOWN ARE APPROXIMATE AND WERE DIGITIZED FROM	
GOOGLE EARTH AERIAL PHOTOGRAPHY. 7. THE LOCATION OF UNDERGROUND UTILITIES WAS NOT PERFORMED AS PART OF THIS SURVEY. UNDERGROUND UTILITIES SHOWN ON THIS PLAN ARE BASED ON ABOVE GROUND FEATURES AND CITY OF AUBURN GIS DATA ONLY, MAIN-LAND RECOMMENDS THE USE OF DIG SAFE OR OTHER	
ENTITIES TO MARK ANY UNDERGROUND UTILITIES PRIOR TO THE BEGINNING OF ANY	
CONSTRUCTION. 3. WETLANDS DELINEATED BY MAIN-LAND DEVELOPMENT CONSULTANTS, INC. AND LOCATED AT THE	
CONSTRUCTION. B. WETLANDS DELINEATED BY MAIN-LAND DEVELOPMENT CONSULTANTS, INC. AND LOCATED AT THE TIME OF SURVEY AS PART OF TRAVERSE. 9. CONTOURS SHOWN ARE BASED ON A TOPOGRAPHIC SURVEY COMPLETED BY MAIN-LAND	A A A A A A A A A A A A A A A A A A A
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<ul> <li>CONSTRUCTION.</li> <li>8. WETLANDS DELINEATED BY MAIN-LAND DEVELOPMENT CONSULTANTS, INC. AND LOCATED AT THE TIME OF SURVEY AS PART OF TRAVERSE.</li> <li>9. CONTOURS SHOWN ARE BASED ON A TOPOGRAPHIC SURVEY COMPLETED BY MAIN-LAND DEVELOPMENT CONSULTANTS, INC AND SUPPLEMENTED WITH STATE OF MAINE LIDAR DATA WITH A CONTOUR INTERVAL OF 1-FOOT. THE VERTICAL DATUM IS NAVD88 AND BASED ON GPS</li> </ul>	PROPERTY BOUNDARY (T)
<ul> <li>CONSTRUCTION.</li> <li>8. WETLANDS DELINEATED BY MAIN-LAND DEVELOPMENT CONSULTANTS, INC. AND LOCATED AT THE TIME OF SURVEY AS PART OF TRAVERSE.</li> <li>9. CONTOURS SHOWN ARE BASED ON A TOPOGRAPHIC SURVEY COMPLETED BY MAIN-LAND DEVELOPMENT CONSULTANTS, INC AND SUPPLEMENTED WITH STATE OF MAINE LIDAR DATA WITH A CONTOUR INTERVAL OF 1-FOOT. THE VERTICAL DATUM IS NAVD88 AND BASED ON GPS OBSERVATIONS NEAR THE SURVEYED PARCEL.</li> <li>10. NO GEOTECHNICAL EVALUATION PERFORMED. CONTACT AN ENGINEER IMMEDIATELY IF EXISTING</li> </ul>	
<ul> <li>CONSTRUCTION.</li> <li>WETLANDS DELINEATED BY MAIN-LAND DEVELOPMENT CONSULTANTS, INC. AND LOCATED AT THE TIME OF SURVEY AS PART OF TRAVERSE.</li> <li>CONTOURS SHOWN ARE BASED ON A TOPOGRAPHIC SURVEY COMPLETED BY MAIN-LAND DEVELOPMENT CONSULTANTS, INC AND SUPPLEMENTED WITH STATE OF MAINE LIDAR DATA WITH A CONTOUR INTERVAL OF 1-FOOT. THE VERTICAL DATUM IS NAVD88 AND BASED ON GPS OBSERVATIONS NEAR THE SURVEYED PARCEL.</li> <li>NO GEOTECHNICAL EVALUATION PERFORMED. CONTACT AN ENGINEER IMMEDIATELY IF EXISTING SOILS CRACK, MOVE, SLIDE OR ERODE OR SHOW ANY INDICATION OF INSTABILITY.</li> </ul>	AUBURN
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SURVEY NOTES

1. CITY OF AUBURN: TAX MAP 260, LOT 197 & 198.

2. INTERIOR BUILDINGS AND PAVEMENT SHOWN ARE APPROXIMATE AND WERE DIGITIZED FROM GOOGLE EARTH AERIAL PHOTOGRAPHY.

- 3. THE LOCATION OF UNDERGROUND UTILITIES WAS NOT PERFORMED AS PART OF THIS SURVEY. UNDERGROUND UTILITIES SHOWN ON THIS PLAN ARE BASED ON ABOVE GROUND FEATURES AND CITY OF AUBURN GIS DATA ONLY, MAIN-LAND RECOMMENDS THE USE OF DIG SAFE OR OTHER ENTITIES TO MARK ANY UNDERGROUND UTILITIES PRIOR TO THE BEGINNING OF ANY CONSTRUCTION.
- WETLANDS DELINEATED BY MAIN-LAND DEVELOPMENT CONSULTANTS, INC. AND LOCATED AT THE TIME OF SURVEY AS PART OF TRAVERSE.
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- 7. THE CONTRACTOR SHALL CONSTRUCT FILL THE SLOPE AT 3:1 WITHIN THE BOUNDARY SHOWN, SHOULD ADDITIONAL FILL MATERIAL BE PROVIDED BY THE CITY PRIOR TO OR DURING WORK. SEE THE APPROXIMATE TOE OF 3:1 FILL EXTENSION.

PLAN REFERENCES

1. "PLAN SHOWING A STANDARD BOUNDARY SURVEY WASHBURN ELEMENTARY SCHOOL", DATED DECEMBER 2021, MADE FOR AUBURN SCHOOL DEPARTMENT, SURVEYED BY MAIN-LAND DEVELOPMENT CONSULTANTS, INC. AND BEING UNRECORDED.

LEGEND

<u>legend</u>	
$\square$	DRAIN MANHOLE
S	SEWER MANHOLE
	CATCH BASIN
	NEW CATCH BASIN
	BOUNDARY LINE (SURVEYED)
	ABUTTING BOUNDARY LINES (APPROX.)
	EDGE OF GRAVEL
-00000	CHAIN LINK FENCE
_000000	NEW CHAIN LINK FENCE
- <b>oooo</b> o	NEW CHAIN LINK FENCE
x _ x _ x _ x _ x _ x x	TEMPORARY CONSTRUCTION FENCE
S	SEWER LINE (APPROX.)
SD	STORM DRAIN LINE (APPROX.)
NUE	NEW UNDERGROUND ELECTRICAL CONDUIT
190	MAJOR CONTOUR LINE
	MINOR CONTOUR LINE
<del></del>	NEW MAJOR CONTOUR LINE
	NEW MINOR CONTOUR LINE
	PAVEMENT
The me	WETLAND BOUNDARY
× 190.4'	SPOT GRADE
SF	TEMPORARY SILTFENCE
NSD	NEW STORMDRAIN



# EXISTING CONDITIONS AND DEMOLITION

- E1. TOPOGRAPHIC AND BOUNDARY SURVEY INFORMATION SHOWN ON THIS DRAWING PERFORMED AND SUPPLIED BY MAIN-LAND DEVELOPMENT CONSULTANTS, INC (MAIN-LAND). TOPO ON STREETS OPPOSITE SCHOOL BY GIS
- E2. CONTRACTOR SHALL VERIFY SITE CONDITIONS, INCLUDING TEST PITS FOR LOCATIONS AND INVERTS OF UTILITIES, AND REPORT ANY DISCREPANCIES TO MAIN-LAND PRIOR TO PROCEEDING WITH THAT PORTION OF THE WORK.
- E3. EXCAVATE, STOCKPILE, CONDITION, AND REUSE TOPSOIL ON-SITE.
- E4. RELOCATE EXISTING TBM INFORMATION ONTO NEW TBM OF CONTRACTORS CHOICE FOR CONSTRUCTION USE PRIOR TO REMOVAL OF EXISTING TBM.
- E5. PRIOR TO BEGINNING DEMOLITION OR SITE WORK, THE GENERAL CONTRACTOR SHALL SCHEDULE A PRE-CONSTRUCTION MEETING WITH THE CITY OF AUBURN ENGINEERING DEPARTMENT TO DISCUSS THE INSPECTION PROCESS AND PROJECT SCHEDULE.
- E6. CONTRACTOR LAYDOWN AREA AVAILABLE ON SITE. COORDINATE WITH OWNER PRIOR TO MOBILIZATION.
- E7. PRE-BID AND PRE-CONSTRUCTION MEETINGS WITH OWNER, SCHOOL PRINCIPAL, CONTRACTOR, AND ENGINEER TO BE PROVIDED.
- E8. SCHOOL IS OUT OF SESSION BETWEEN JUNE 16TH AND AUGUST 29TH. CONTRACT MUST BE SUBSTANTIALLY COMPLETE BEFORE SCHOLL COMMENCES.
- E.9 CITY ARBORIST TO PROVIDE TREE CUTTING AND CLEARING.
- E.10 NO SMOKING ON OWNER PROPERTY. NO FOUL LANGUAGE WHEN CHILDREN ARE IN SIGHT. NO CONTACT WITH STUDENTS IS PERMITTED.
- E.11 SEE SPECIFICATIONS BOOK, WHICH IS PART OF THE DESIGN DOCUMENTS.

# SITE LAYOUT AND MATERIALS

L1. DIMENSIONS ARE TO FACE OF CURB AND TO FACE OF FOUNDATION UNLESS NOTED OTHERWISE.

- L2. AT NO TIME SHALL CONTRACTOR RESTRICT ACCESS TO SCHOOL PROPERTY WITHOUT APPROVAL OF THE SCHOOL PRINCIPAL.
- L3. PAVEMENT EDGES SHALL BE TRUE TO LINE. SAWCUT EXISTING PAVEMENT IN SMOOTH STRAIGHT LINES.
- L4. PROVIDE TRAFFIC CONTROL SIGNAGE AND STRIPING AS SHOWN AND IN ACCORDANCE WITH U.S.D.O.T. MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES.

# GRADING AND EROSION CONTROL

- G1. ADD 6" LOAM, SEED AND MULCH TO DISTURBED AREAS UNLESS OTHERWISE NOTED. PROVIDE EROSION CONTROL MESH ON ALL SLOPES 6:1 OR STEEPER, AND ALONG DITCH CHANNELS.
- G2. PUDDLING OF WATER WILL NOT BE ACCEPTABLE.
- G3. MAINTAIN TEMPORARY EROSION CONTROL MEASURES FOR THE FULL DURATION OF CONSTRUCTION. INSPECT WEEKLY AND AFTER EACH STORM AND REPAIR AS NEEDED. REMOVE SEDIMENTS FROM THE SITE, PLACE IN AREA OF LOW EROSION POTENTIAL, AND STABILIZE WITH SEED AND MULCH.
- G4. PLACE TEMPORARY SOIL STABILIZATION WITHIN 7 DAYS OF INITIAL DISTURBANCE. PLACE PERMANENT SOIL STABILIZATION WITHIN 7 DAYS OF FINAL GRADING.

# <u>UTILITIES</u>

- U1. THE ACCURACY AND COMPLETENESS OF SUBSURFACE INFORMATION IS NOT GUARANTEED. VERIFY SITE CONDITIONS INCLUDING TEST PITS FOR LOCATIONS AND INVERTS OF UTILITIES AND REPORT ANY DISCREPANCIES TO MAIN-LAND PRIOR TO PROCEEDING WITH THAT PORTION OF THE WORK.
- U2. PROVIDE AT LEAST 5' OF SOIL COVER OVER WATER LINES AND SEWER FORCE MAIN.
- U3. COORDINATE WORK ON UTILITY LINES OR WITHIN ROAD RIGHT-OF-WAY WITH THE UTILITY COMPANIES AND CITY ROAD DEPARTMENT.
- U4. SLOPE CONDUITS AWAY FROM BUILDING TO HANDHOLE OR UTILITY POLE TO AVOID GROUNDWATER SEEPAGE INTO BUILDING.

# UTILITY LOCATION REQUIREMENTS

PRIOR TO EXCAVATION, VERIFY THE UNDERGROUND UTILITIES, PIPES, STRUCTURES, AND FACILITIES. PROVIDE THE FOLLOWING MINIMUM MEASURES.

CREWS KNOW WHERE TO MARK THEIR LINES.

- BEFORE STARTING WORK. DON'T ASSUME SOMEONE ELSE WILL MAKE THE CALL.

C. WAIT THREE BUSINESS DAYS FOR LINES TO BE LOCATED AND MARKED WITH COLOR-CODED PAINT, FLAGS, OR STAKES. NOTE THE COLOR OF THE MARKS AND THE TYPE OF UTILITIES THEY INDICATE. TRANSFER THESE MARKS TO THE AS-BUILT DRAWINGS.

E. RE-NOTIFY DIG SAFE AND THE NON-MEMBER UTILITIES IF THE DIGGING. DRILLING. OR BLASTING DOES NOT OCCUR WITHIN 30 CALENDAR DAYS, OR IF THE MARKS ARE LOST DUE TO WEATHER CONDITIONS, SITE WORK ACTIVITY, OR ANY OTHER REASON.

F. HAND DIG WITHIN 18 INCHES IN ANY DIRECTION OF ANY UNDERGROUND LINE UNTIL THE LINE IS EXPOSED. MECHANICAL METHODS MAY BE USED FOR INITIAL SITE PENETRATION, SUCH AS REMOVAL OF PAVEMENT OR ROCK.

- H. FOR COMPLETE DIG SAFE REQUIREMENTS, CALL THE P.U.C. OR VISIT THEIR WEBSITE.

I. IF YOU DAMAGE, DISLOCATE, OR DISTURB ANY UNDERGROUND UTILITY LINE, IMMEDIATELY NOTIFY THE AFFECTED UTILITY. IF DAMAGE CREATES SAFETY CONCERNS, CALL THE FIRE DEPARTMENT AND TAKE IMMEDIATE STEPS TO SAFEGUARD HEALTH AND PROPERTY.

FILE AND INCIDENT REPORT WITH THE P.U.C.. FOR AN INCIDENT REPORT FORM VISIT WWW.STATE.ME.US/MPUC OR CALL THE P.U.C. AT 1-800-452-4699.





1. FILL SHALL BE COMPACTED IN 6" TO 12" LAYERS TO AVOID SETTLEMENT. COMPACT FILL UNDER PAVEMENTS AND GRAVEL AREAS TO 95% OF MAXIMUM DRY DENSITY; AND UNDER GRASS OR MULCH AREAS TO 90% OF MAXIMUM DRY DENSITY. 2. SOILS SHALL NOT CONTAIN COBBLES LARGER THAN 8" IN THE

GREATEST DIMENSION, ICE, FROZEN SOIL, OR ROOTS/STUMPAGE. 3. DO NO WORK ON FROZEN OR MUDDY GROUND. 4. UNROLL MAT ONTO GROUND IN DIRECTION OF WATER FLOW. 5. MAT SHOULD LIE FLAT. DO NOT STRETCH MAT OVER GROUND. STRETCHING MAY CAUSE MAT TO BRIDGE DEPRESSIONS IN THE

SURFACE AND ALLOW EROSION UNDERNEATH. 6. BURY TRANSVERSE TERMINAL ENDS OF MAT TO SECURE AND PREVENT EROSIVE FLOW UNDERNEATH. 7. SECURE MAT SNUGLY INTO ALL TRANSVERSE CHECK SLOTS.

8. BACKFILL AND COMPACT TRENCHES AND CHECK SLOTS AFTER STAKING THE MAT IN BOTTOM OF TRENCH. 9. OVERLAP ROLL ENDS BY THREE (3) FEET (MIN.) WITH UPSLOPE

MAT ON TOP TO PREVENT UPLIFT OF MAT END BY WATER FLOW. IF INSTALLING IN THE DIRECTION OF A CONCENTRATED WATERFLOW. START NEW ROLLS IN A TRANSVERSE DITCH. 10. OVERLAP ADJACENT EDGES OF MAT BT THREE (3) INCHES

(MIN.) AND STAKE. 11. WOOD STAKES ARE RECOMMENDED FOR PINNING MAT TO THE

GROUND SURFACE. STAKES SHOULD BE 1" X 3" NOMINAL STOCK CUT IN A TRINGULAR SHAPE. STAKES SHOULD BE 12" TO 18" LONG, DEPENDING ON SOIL DENSITY. 12. DRIVE WOODEN STAKES TO WITHIN THREE (3) INCHES OF

GROUND SURFACE. DO NOT DRIVE FLUSH TO SURFACE. 13. IN ALL TRANSVERSE TERMINAL TRENCHES AND CHECK SLOTS, STAKE EACH MAT AT ITS CENTER AND OVERLAP EDGES BEFORE

BACKFILLING AND COMPACTING. 14. STAKE OVERLAPS LONGITUDINALLY AT THREE (3) TO FIVE (5)

FOOT INTERVALS. 15. FOLLOW COLORED DOT PATTERNS BY MANUFACTURER.





Machanical Drenautica	<b>+</b> 1 14 11 1		1445
Mechanical Properties	Test Method	Units	MARV
Grab Tensile Strength	ASTM D 4632	kN (lbs)	1.62 (365) X (
Grab Tensile Elongation	ASTM D 4632	%	24 X
Puncture Strength	ASTM D 4833	kN (lbs)	0.40 (9
Mullen Burst Strength	ASTM D 3786	kPa (psi)	3097 (4
Trapezoid Tear Strength	ASTM D 4533	kN (lbs)	0.51 (115) X
UV Resistence	ASTM D 4355	%	90
Apparent Opening Size	ASTM D 4751	Mm (US Std Sieve)	0.425 (
Flow Rate	ASTM D 4491	1/min/m²(gal/min/ft²)	5907 (1
Permittivity	ASTM D 4491	Sec <sup>-1</sup>	2.1

Mechanical Properties	Test Method	Units	MARY
Grab Tensile Strength	ASTM D 4632	kN (lbs)	1.78 (400) x
Grab Tensile Elongation	ASTM D 4632	%	15 x
Puncture Strength	ASTM D 4833	kN (lbs)	0.67 (1
Mullen Burst Strength	ASTM D 3786	kPa (psi)	5506 (8
Trapezoid Tear Strength	ASTM D 4533	kN (lbs)	0.67 (150) x
UV Resistence	ASTM D 4355	%	90
Apparent Opening Size	ASTM D 4751	Mm (US Std Sieve)	0.425
Flow Rate	ASTM D 4491	1/min/m² (gal/min/ft²)	2852 (
Permittivity	ASTM D 4491	Sec <sup>-1</sup>	0.90